ABSTRACT OF A

Clinical Lecture

ON THE

SURGERY OF THE THYROID.

Delivered at the Manchester Royal Infirmary, December 8th, 1887,

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GENTLEMEN,—Until quite recently the thyroid was regarded as a gland without any function. Dr. Ord, in 1878, first accurately described a disease he called myxœdema, an instance of which we have recently had in hospital. In myxœdema we have a disease principally recognised and characterised by swelling of the subcutaneous tissues throughout the body, caused by the accumulation and stagnation of a jelly-like substance, the composition of which is not at present definitely settled. The appearance of the patients very much resembles that of ordinary œdema, with the exception that the swellings are resistent. Kocher, in 1883, in communicating to a continental Society 101 cases of thyroidectomy, drew marked attention to the subsequent occurrence of symptoms strikingly resembling myxœdema which had developed in patients whose thyroids he had completely removed—a condition which did not result when only portions of the gland had been excised. Professor Billroth, on the contrary, who probably has had the largest experience of any surgeon in thyroidectomy, has never observed this condition to follow the operation. The following year Victor Horsley, in his Brown Lectures, gave his results of excising the thyroids of monkeys, and contended that he had produced a facsimile of myxœdema by completely removing the thyroid gland. Remarkable statements such as these, you must admit, make the present a fitting moment to avail ourselves of every opportunity of studying the surgery of the thyroid, and as I have recently had a number of cases in our hospital, where I have operated on the gland, I propose drawing your attention to them this morning.

Before we can profitably consider these cases, we will for a moment glance at the anatomical relations and gross structure of the thyroid. The thyroid is described as consisting of two lateral lobes placed one on each side of the trachea, and connected by a transverse portion called the isthmus. The isthmus passes in front of the second and third cartilages of the trachea, to which it is attached by a firm layer of fascia, and it is owing to this attachment that tumours of the thyroid rise and fall with each effort of swallowing—a diagnostic sign of great practical value. This is the ordinary arrangement; but—and this is a point of great surgical importance—the gland is sometimes supplemented by a third lobe, which is situated on the left side of the upper part of the isthmus; and, again, less frequently, but of even still greater importance, a lobe exists which passes behind the trachea and in front of the œsophagus. In dogs these supernumerary thyroids are much more frequently met with, twenty-six out of thirty dogs being found to possess them. They are generally situated on the external surface of the aorta, within the pericardial sac. They vary in size from a millet-seed to that of a filbert. These supernumerary thyroids help to explain and reconcile discrepancies between different operators. The great importance of remembering these several deviations depends upon the fact that any portion of the gland may be separately diseased, and each portion affected involves different consequences and requires special lines of treatment. The important structures which form the immediate boundaries of the gland consist of the carotid artery, jugular vein, and vagus on each side, and, passing behind each inferior thyroid artery, the recurrent laryngeal nerve may come into dangerous proximity to the gland. Although the normal thyroid only weighs about two ounces, the vascular supply is phenomenal. It has been estimated that "the sum of the sectional area of the thyroid arteries is more than half that of the cerebral arteries," and the arteries during disease have been found augmented to a third of an inch in diameter. Meyer came to the conclusion that the thyroid received as much blood as the forearm; and Soemerring stated that its arteries are eight times as large as those of the brain, when their respective weights are considered. McWhinnie always found that the inferior thyroid was larger than the superior. Consequently, although the surroundings in close proximity to the gland are important, they are nothing in comparison with the vascular supply of the gland itself. These are significant facts for inexperienced surgeons to remember before rashly contemplating heroic operations on the thyroid gland. It is not the arteries, however, which are most to be feared; it is the treacherous veins with their thin walls we have to treat with the greatest consideration. The thyroid like many other glands, is surrounded by a fibrous capsule; from the inner surface are derived trabeculæ of connective tissue penetrating into the interior of the mass and forming the stroma of large alveolar spaces. The stroma is richly supplied with bloodvessels and lymphatics. The acini are

FIG. 1.

lined with epithelium, and contain a glairy fluid which is secreted from the blood by their lining epithelium. This secretion in health is reabsorbed by means of the lymphatics. The three structures you have to bear in mind in considering the ordinary pathological changes which take place in the gland are the acini, the stroma of connective tissue, and the vessels, and it is simply the variation in the relative proportions of these structures which constitutes the common diseases of the gland. The changes we usually find are principally one of two: either you get atrophy with a shrinking of the gland and an arrest of its function, or you get hypertrophy either of the stroma or of the proper gland tissue, or a combination of the two. If the hypertrophy of the stroma predominates, we call it a fibrous adenoma; if the acini more particularly become dilated, a cystic adenoma. The mischief may involve the whole of the gland, or it may be confined to either of the lobes, the isthmus, or to any supplementary portion of the thyroid, should it exist. Experience has shown that the right lobe appears more frequently affected than the left.

The photograph (Fig. 1) represents the appearance of a

man upon his admission into the Manchester Royal Infirmary on Oct. 5th suffering from an enlargement of the thyroid gland. The patient is thirty-nine. The tumour was first noticed when he was thirteen years old, and it gradually attained the size you see depicted in the photograph, extending from the chin to the sternum. The tumour gave no serious inconvenience to the patient, but prevented his obtaining any permanent employment, and for that reason alone he decided to have it removed. The tumour was soft and elastic, and gave the sense of fluctuation; the skin over the growth was normal and freely movable. The tumour rose and fell with deglutition. There was no exophthalmos, anæmia, or palpitation. The tumour was removed by a median vertical incision, the vessels being divided between double ligatures. This is the tumour; it is cystic, and the wall in parts is distinctly cartilaginous, as you can easily detect with the finger. The patient was convalescent in about fourteen days, and I will now introduce him to you in perfect health, with no signs of the tumour remaining.

I will just mention to you a somewhat similar case discharged from the hospital quite cured last July. This photograph (Fig. 2) gives a good idea of his appearance upon admission. The patient, forty-two years of age, had

FIG. 2.

only been troubled with the tumour for five years. It grew slowly first and very regularly, until at the commencement of this year he received a blow on the side of his head from a piece of metal suddenly detached from a lathe; after this the tumour rapidly attained the size shown in the photograph. There was a slight exophthalmos, and he complained of frequent palpitation. His general health had deteriorated of late, and he had been compelled to relinquish his employment. The tumour was removed on July 8th, and in ten days he left the hospital, and had the photograph (Fig. 3) I hand round to you taken.

These cases are selected from a number I have successfully operated upon during the last few years, but I should serve no useful purpose in giving you the details of all my cases. Some of the cases I have already published, and others I have exhibited at our Medical Societies' meetings. The two cases I have briefly mentioned will more than suffice for our purpose this morning. This tumour, which weighs a pound and a quarter, and measures fourteen inches and a half in circumference, removed from the second case, I will hand round, and I want you to notice through the aperture I have made into the interior that, although at first sight it appears one uniform cyst, you will notice a number of ruptured cysts attached to its wall. These broken down cysts convey the idea that at one time the tumour must have been composed of a number of small cysts, and that by degrees they had ruptured one into the other, and that the last to remain intact had been those near the boundary of the growth. Although this has not been the precise course that has taken place, it has been somewhat similar. There has been an antagonism between the rate of growth of the interstitial tissue separating the cavities and the dilatation of the acini, and in the contest the septum between the cysts has had to give way by atrophic changes. Degenerative changes also take place, and the degeneration may be of two kinds: the colloid, which is the more common; and the amyloid, which is very rare. The same thing has taken place in this tumour which was removed from the first patient; but you will also notice that in the walls of the cyst there are several isolated areas of hardness. Now it is one of the features of these tumours that after a time—and you remember that I told you this tumour had been growing twenty-six years—they undergo extensive calcification or ossification, and this is an instance in point.

Whilst having a very strong preference myself for excision

FIG. 3.

of the thyroid in all cases where surgical interference is imperative, I must point out to you that there are other surgeons who consider the cystic variety of enlargement may be cured by less radical treatment. There is the injection of the cysts with some irritating fluid that will induce an amount of inflammatory mischief, which will result in the suppurative destruction of the morbid structures, and lead eventually to the shrinking of the tumour: assuming that this treatment is generally successful, comparatively free from danger, and painless—all of which I disbelieve,—it is a process which, according to the statements of its advocates, takes months to accomplish; whereas the treatment by excision is certain, free from pain, and the convalescence confined to a few weeks at the outside. Kocher has performed strumectomy—the title they give in Germany to excision of the thyroid—on three hundred cases, and in one series of a hundred cases he had not a single death. Socin has performed the excision fifty-seven times, and has never had a fatal result or serious complication from the operation.

The operation of excising the thyroid, after all, is not so very formidable if certain common-sense precautions be strictly adhered to throughout. In the first place, be sure you get on to the gland, and do not be misled by the thyroid muscles which are found stretched over it and very much altered in character. Many mistakes have been made by following the muscle laterally until the surgeon has become hopelessly bewildered. Carefully divide layer after layer until you get to the capsule. The vessels are the best guide. The second precaution is to secure each vessel separately as it is met with, and divide them between two ligatures of Chinese silk or reliable catgut. By a process of "teasing" with a blunt instrument—I prefer the points of blunt scissors—the thickest attachments of the tumour can by this plan be gradually thinned and reduced to mere filaments, while the smallest vessel can be distinguished and secured. The "teasing" should always be directed from the tumour to the point of attachment, which will usually be in the axis of the vascular supply. By adopting these rules the operation may be completed with practically no loss of blood.

The ordinary Derbyshire neck, where there is a general hypertrophy of both lobes and isthmus, and where the hypertrophy equally affects the acini and the intra-lobular tissue, rarely, beyond the deformity, gives any distress to the patient; but when serious inconveniences are experienced, such as the fear of suffocation from pressure on the trachea, there are two ways of dealing with the tumour. The isthmus may be either divided or removed. Mr. Southam recently had a case of this kind in the infirmary, and I assisted him in removing the isthmus and a portion of the right lobe. In this case it was remarkable how easy it was after once getting into the gland to break down and pull away large portions of the overgrowth. In fact, I believe, had we been disposed, we could have removed the whole of the gland in this manner. As it was, the patient made an excellent recovery, and the remainder of the gland is gradually shrinking away. During this year Mr. Hardie admitted a patient on the verge of suffocation from compression of the trachea by an enlarged thyroid. Mr. Hardie divided the isthmus, and gave immediate relief. Those who are deficient in confidence may effect the division with Paquelin's or any other actual cautery.

Spontaneous resolution of a goitre occasionally takes place, and I once witnessed a singular instance of such an occurrence. In 1863 I was attending the housekeeper of a gentleman residing at Plesley, in Derbyshire, for one of the largest bronchoceles I ever witnessed. She was taking a preparation of iron, called, if I remember correctly, the "magnetic phosphate of iron." I saw the neck one afternoon, as large as ever, suspended in a sling constructed with a handkerchief, worn round her neck. The next morning the whole of the tumour had disappeared, leaving the neck, to all appearances, quite natural. At the time I attributed the cure to the preparation of iron, but its unsuccessful employment in numerous cases afterwards convinced me that the drug had nothing whatever to do with the sudden resolution of the gland.

The treatment of exophthalmic goitre is generally regarded as medical, but I have recently had under my care a lady from Bury with an exaggerated condition of this complaint, who is rapidly recovering under treatment by simple faradisation. I very soon found that for this to produce any effect the sittings must be prolonged and numerous—half an hour each time, and repeated at least twice each day. After adopting this plan for three months my patient was restored from a condition of helplessness to one of comfort, and with a capacity for light employment.

I have drawn special attention to the fact that the recurrent laryngeal nerves pass behind the inferior thyroid arteries for the reason that they have frequently been injured during excision of the gland. In one case Dupuytren cut and ligatured the right recurrent nerve, and death took place in thirty-five hours. Klein met with a similar accident, and the patient's voice became permanently of a deep bass. Nine years ago I removed a cystic goitre from the patient whose photograph I hand round, and her voice remained for twelve months a mere whisper, but eventually recovered its original tone. The after-treatment which I have employed, and which has given me such capital results, may be described as simply free drainage and immobility of the head for the first four days. The tissues are brought together with wire sutures. A large perforated rubber tube extending the full length of the wound, and protruding above and below, is introduced, the surface dusted with iodoform, a wood wool pad placed in front of the neck, and secured with quantities of stiff gauze. The gauze acts as a collar and keeps the head in a fixed position, allowing primary union to take place through the parts being allowed perfect rest.

THE EFFECTS OF MODERATE DRINKING ON THE HUMAN CONSTITUTION;

ITS INFLUENCE ON LIVER, KIDNEY, HEART, AND BRAIN DISEASES.

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No. III.

ALCOHOL, when taken in small quantity, is in general said to act as a direct cardiac stimulant, and its stimulating effect is supposed to be due to its possessing the faculty of increasing the muscular power of the heart. I take an entirely different view of the matter, and shall now endeavour to show how the increase in the force of the heart's movements, the quickening of the pulse, the flushing of the face, the congestion of the retinal bloodvessels, as well as all the other visible appearances of accelerated cardiac functional activity, are in reality in no wise due to the stimulating action of alcohol, either on the heart's muscular tissue or the nerves supplying it, but actually to the very reverse—namely, its paralysing effects on the cardiac nerve mechanism. This may appear a strange idea to those unfamiliar with the advanced theories regarding the accelerating and restraining heart's nerve forces. Nevertheless, it is quite consonant with the results of modern physiological investigations, which go far to prove that every function of organic life—no matter whether it be the expulsion of the urine, the peristaltic movements of the intestines, the throbbings of the heart, or involuntary respiration—acts under the immediate influence of a bifold nerve mechanism. For example, the human heart is endowed with two entirely different and opposing centres of nerve force, and so retro-active are their respective functions that the sole duty of the one appears to be to regulate and control the functions of the other. To the former has been given the name of inhibitory, or restraining mechanism; to the latter that of the exciting or accelerating nerve agency. The inhibitory nerve centre being thought to exist in the medulla oblongata, in close proximity to the vaso-motor nerve centre, and the vagus being supposed to contain the fibres with which it communicates its influence to the heart. The sympathetic, on the other hand, is believed to be the channel of communication between the moto-cardiac nerve centre and that organ. Destroy or paralyse the inhibitory nerve centre, or arrest its power of communicating with the heart by dividing the vagus, and instantly its controlling effect on the cardio-motor mechanism is lost, and the accelerating agent, being no longer under its normal restraint, runs riot. The heart's action is increased, the pulse is quickened, an excess of blood is forced into the vessels, and from their becoming engorged and dilated the face gets flushed and the retina congested—all the usual concomitants of a general engorgement of the circulation being the result. Instead of paralysing the vagus by section, and thereby arresting its inhibitory cardiac nerve power, paralyse it through the instrumentality of a toxic agent, and precisely the same chain of phenomena will of necessity be the result. The most powerful paralyser of the vagus we at present know of is atropia; and what happens when it is given in a full dose? Nothing more or less than the effects we have here attributed to the section of the vagus—tumultuous heart's action, quickened pulse, congested face and eyes, &c. Alcohol acts on the heart, I believe, in precisely the same manner as atropia does, although less strongly. That is to say, it quickens the heart's action, as well as apparently increases its power, by paralysing its restraining or inhibitory nerve mechanism. This, however, is only the primary action of alcohol on the cardiac organ, for no sooner is the quantity administered sufficiently increased than all its at first apparently stimulating effects vanish.

From its now possessing adequate power to paralyse the accelerating as well as the retarding cardiac nerve mechanism, the heart's action, therefore, now becomes diminished, *pari passu* with the amount of the paralysing agent employed, until at length (if a sufficiency be given) the cardiac movements are totally arrested, and death closes the scene. Effects on the human organism being, when properly interpreted, like effects in the inorganic world—exactly proportionate to cause,—the at first sight apparently stimulating and consequently salutary action of alcohol on the heart, when taken in moderation, is as much due to the alcohol's paralysing power as the destruction of all vital action is its result when it is taken in poisonous quantities. From this, however, it is not to be inferred that its incipient paralysing power over the inhibitory cardiac nerve mechanism must necessarily be in all cases detrimental. On the contrary, it may actually in many instances be beneficial. Just in the same way as atropia, strophanthus, digitalis, and daturine—which are all cardiac inhibitory nerve paralysers—prove exceedingly useful medicinal agents when they are judiciously employed in appropriate cases. So alcohol, by the doctor's skill, may in like manner be so used as to paralyse to cure, and not to kill.

It being well known that intemperance is a most fruitful cause, not only of all the various forms of heart disease, but likewise of the degenerations of the coats of the blood vessels, all I at present require to do is to prove that even what is called moderate drinking has a much greater share than is generally supposed, in not only greatly increasing heart diseases, in cases where they already exist, but also in inducing their development in the constitutionally and hereditarily predisposed to become affected by them. The reason why moderate drinking should induce not only hypertrophy and dilatation, but likewise valvular disease of the heart, is not far to seek—from its being a recognised fact that every increase in a muscle's activity is associated with an increase in its development, as well as its tension on the parts with which it is connected. Therefore, just as it happens that the dealers in horses, "runners-out," whose hearts are called upon to make oft-repeated and sudden exertions, are prone to become the victims of heart disease; in like manner the oft-repeated sudden spurts of cardiac activity induced by the frequent indulgence in small quantities of alcohol lead, for precisely similar reasons, to equally deleterious consequences in persons either already affected with or liable to become affected by heart derangements. Moreover, the congestions of the liver, accruing either from the direct action of alcohol on the liver tissues, or from its indirect effects in favouring hepatic congestions and inflammations through the instrumentality of chills, materially enhance the prejudicial action of alcoholic stimulants on feeble hearts. For all obstructions to the free circulation of the blood, no matter whether they exist in the heart itself, in the lungs, in the liver, or anywhere else, from their necessitating an increase in its labour, in order to try and overcome them, act most injuriously upon the organ—not only in direct proportion to their amount, but also in proportion to its own inherent weakness. The truth of one and all of the foregoing statements will, by a little reflection, be gleaned from the results of drinking small quantities of alcohol frequently during the day, as manifested by the figures in the subjoined table of mortality I have drawn up from the Registrar-General's Reports,[1] of the relative frequency of diseases of the circulatory system among men between the ages of twenty-five and sixty-five employed in different industries. For it not only shows the effects of so-called moderate drinking *per se*, but likewise the still more pernicious effects of it when it is associated with intermittent muscular strain. That is to say, when the stimulus of alcohol upon the heart has superadded to it an increase in the heart's activity necessitated by oft-repeated sudden muscular efforts. For while it shows that all exposed to the partaking of alcoholic stimulants in small quantities at a time are much more frequently affected with the fatal forms of cardiac diseases than others, it in an equally unmistakable way shows that men who, like brewers, require in the course of their trades to tax their muscular strength, and thereby throw additional work upon their hearts, are far more often attacked with the fatal forms of diseases affecting the circulatory system than men equally addicted to imbibe alcoholic stimulants, but who are not called upon to make similar kinds of straining muscular efforts.

The relative proportions of deaths from diseases of the circulatory system in the different classes are:—

Those not exposed to the temptation of drinking.		*Those exposed by their avocations to the temptation of drinking.*	
Drapers and warehousemen ...	75	Commercial travellers	100
Gardeners and nurserymen ...	82	Vintners, waiters, and barmen	146
Printers	93	Brewers	165

Moreover, it is equally known that intemperance is a most active agent in the induction of atheromatous degenerations in the coats of the arterial system, and as such a fruitful source not only of death by cardiac syncope, but likewise by apoplexy, from the cerebral vessels being quite as frequently and as severely affected with the degeneration as those of the heart itself, and the coats of the one set being as liable to sudden rupture as those of the other, if not, indeed, even more so, from the less solid nature of the brain surroundings. I wish now to call special attention to what I believe to be a fact—namely, that what is termed "moderate drinking" is a far more general cause of atheromatous degeneration of the coats of the bloodvessels than is usually supposed. The knowledge of this fact has on more than one occasion proved exceedingly useful to me, when being asked to give a prognosis in cases of heart disease (which, from an examination of the brachial arteries, I have found to be associated with even slight atheromatous degeneration of the bloodvessels), from my invariably making it a point of warning the friends that, notwithstanding that the patient labours under advanced organic heart disease, it is not at all unlikely that he will die suddenly from apoplexy instead of from the heart's disease itself. In illustration of this, I may allude to two most important as well as characteristic cases of the kind which are fresh in my memory, in which, notwithstanding that both were cases of serious heart disease, neither the death of the one nor of the other was due to failure of the heart's action, but to the rupture of a cerebral bloodvessel.

The one was a case of mitral valvular disease associated with extensive atheromatous degeneration of the arteries, while the other was a case of extensively hypertrophied and dilated heart, equally associated with degenerated arteries. The first patient died from apoplexy and right side hemiplegia, with which he was seized while hurriedly dismounting from horseback, after riding hard in order to catch a train. The second succumbed from coma, rapidly supervening upon an apparently temporary attack of giddiness and partial unconsciousness, to attacks of which kind he had been liable for two years, and which one out of the four consultants he applied to most erroneously, I think, imagined were of an epileptic kind: I say erroneously from the fact that the unconsciousness was sometimes not only accompanied by a difficulty in articulation, lasting for twenty-four hours, but was partial; and there never was either a scream before, stertorous breathing during, or drowsiness after any of the attacks. His first seizure, indeed, was diagnosed by his usual doctor as one of sunstroke, from its having happened on a broiling hot day during the time he was witnessing a cricket match at Lord's. Both of the cases I am now referring to were men of position, and well known to several of the leading members of our profession as gentlemen not only of active minds, but active bodies. For they had all their lives been accustomed to take plenty of exercise, in the shape of hunting and other kinds of field sports, and, until they were over fifty years of age had never had a day's illness; indeed, even during their illnesses they looked remarkable specimens of perfect health. They had both lived well, though they had a perfect right to call themselves moderate drinkers, as neither of them ever indulged in stimulants, either to excess or except at meal-times. The first became aware of something being wrong eight years before his death, by noticing that he got out of breath on walking fast, and that he occasionally felt a little giddy, without any apparent cause. It was on account of these symptoms that he was sent to me—after he had seen three other consultants—by the late Mr. W. Coulson, of St. Mary's Hospital. His visit led to the discovery that he had valvular disease of the heart, associated with atheromatous degeneration of the arteries. And I have but little doubt that it was on account of his being at once made aware of this fact, and having strongly pointed out to him the necessity of changing his mode of life and paying careful attention to regimen, that

[1] Supplement to the Forty-fifth Annual Report, 1885, which takes in the whole previous ten years' death-rates, and may consequently be accepted as yielding a reliable average.

the fatal termination was so long postponed. He did not even die immediately from the sudden attack of apoplexy above alluded to; for, by dint of care, he in three months' time partially recovered from both the apoplexy and its associated right-side hemiplegia, and might possibly have lived for some years longer had he not given way to a sudden outburst of temper, which induced the still imperfectly healed cerebral bloodvessel, or some other equally weak one, to give way, and cause his almost instantaneous death in the presence of his local doctor, who happened to be with him at the time. The immediate cause of the last attack in the case of the patient with hypertrophied and dilated heart I attributed to the excitement he underwent from a horse he was driving running away. So that both cases may be said to illustrate well the necessity of always enjoining on patients similarly affected the absolute necessity of avoiding all forms of sudden mental excitement, as well as of bodily exertion.

ON THE

POSSIBILITY AND UTILITY OF WASHING OUT THE PELVIS OF THE KIDNEY AND THE URETERS THROUGH THE BLADDER.

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IN THE LANCET of Oct. 29th, 1887, I have illustrated the use of suction as a means of extracting certain kinds of foreign bodies from the bladder, and incidentally referred to a case where I believe a renal calculus had been dislodged from the ureter in this way. In connexion with some experiments upon which this practice was based, I would now refer more especially to the possibility of distending the ureters with fluid, and thus reaching the pelvis of the kidney. In the normal condition of the parts such a process could only be brought about, I believe, by very gradual means, as the mode in which the ureters enter the bladder is to render sudden regurgitation of fluids from the latter towards the kidneys wellnigh impossible. In cases of long-standing stricture and prostatic obstruction, we see this provision gradually destroyed until the ureters and pelvis of the kidney become little else than subsidiary bladders. Again, in other instances the valve-like arrangement which prevents fluid passing along the ureters in any other than a downward direction is liable to be deranged by the passage of calculi and suppurative débris, as we so frequently see in tubercular disease of the kidney. With conditions like these, it occurred to me that fluid might be made to pass from the bladder along the ureters to the pelvis of the kidney, and this observation has suggested some trials in practice which I think are worthy of notice.

I have in the previous communication here referred to, alluded to a case where, I believe, a calculus was dislodged from the ureter by distending the bladder with fluid by means of a suitable apparatus, and thus causing a back flow along the canal, which would tend to dilate that portion of it which was below the stone, whilst at the same time some slight movement would probably be communicated to the obstruction. That the ureter was more or less dilated I thought probable from the fact that the patient had been in the habit of passing kidney stones, and had suffered much on these occasions from renal colic. Whether my conclusion that the escape of the calculus was connected with the injection into the bladder was a correct one it is impossible to say, but I thought the coincidence a suggestive one.

Take another instance. A middle-aged man was under my observation a short time ago for acute renal pain and hæmaturia, which I felt sure, from his previous history, was due to a stone in his left kidney. The symptoms continued in spite of a variety of attempts to dislodge the calculus. Then I suggested nephrotomy, but the patient would not consent. Shortly after this the position of the pain changed, and I had reason to believe that the stone had made its way into the ureter. Shampooing of the side, friction, and other means were tried, but without benefit. I then resolved to try fluid distension of the ureter. After washing out the bladder, I filled it with tepid water, upon which pressure was exercised by the evacuator usually employed in lithotrity. The patient made the observation spontaneously, "I can feel something moving in my back." On examining the glass receiver of the aspirator bottle, after a few manipulations, I found that it contained about half a teaspoonful of fragments of phosphates and urates, not in crystals, but apparently in small pieces. These were examined by Dr. Barron, and found to be portions of a calculus. Wherever they may have come from, it was clearly not from the bladder. This process was again repeated in a fortnight afterwards, with similar results, care being taken in the first instance to empty the bladder of anything that it might contain.

A second case, very similar to the one just narrated, is also under observation, where the proceeding was followed by the withdrawal in this way of a small teaspoonful of what proves to be fragments of a urate stone.

When we take clinical facts such as these, and compare them with pathological specimens—as, for instance, the one I have elsewhere figured[1] (through the kindness of Dr. Reliquet of Paris), where an open ureter ultimately induced a calculous pyelitis,—I do not think we can deny the possibility, under certain circumstances, of our being able to distend a ureter with fluid, and thus to reach the pelvis of the kidney. When we consider that most urate stones are usually formed in the kidney, and grow, as it were, by reason of their being accidentally trapped in the bladder, the importance of securing their discharge in the earliest periods of their formation must be obvious. Further, the practice I have thus endeavoured to illustrate may possibly be found useful in facilitating the discharge of inflammatory products from the kidney, and as a means of direct medication in certain cases of hæmaturia which are generally regarded as being beyond the reach of surgical manipulation.

TEREBINTHINATES.

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THERAPEUTISTS have lately evinced a revival of interest in the terebinthinates. One result of this is seen in the extended use of terebine in bronchial affections. I now invite the attention of practitioners to two other allied products, more particularly as to their use in diseases of the respiratory mucous tract. These are (1) the essential oil of the mountain pine and (2) hydrate of terpin.

1. The *Mugho* or *Mountain Pine* is the Pinus pumilio of Lambert, and from which exudes the once-prized Hungarian balsam. By distillation of the young branches with water a volatile oil is obtained long known as "oleum templinum" or "Krummolzöl." This is the most potent agent in the so-called "pine-cure" practised at Reichenhall and other German spas. At these resorts the vapour of the water, as it escapes into the inhalation rooms, is medicated with the volatile oil. The pine baths at these spas are not medicated with the Krummolzöl, but with a much cruder product—viz., an extract obtained by evaporating a decoction of the wood and branches, and perhaps also the residue after the distillation of the oil. Moreover, the baths are mostly employed in rheumatism, gout, and other affections for which thermal baths are suited; while the inhalations are chiefly used in diseases of the respiratory tract. By improved apparatus and greater care in the selection of the material a much finer product is now obtained—in fact, a very pure essential oil, oleum pini pumilionis; and this it is which has lately been imported under the fanciful name "pumiline." This essential oil possesses in a high degree the odour of the most fragrant variety of the pine, and, moreover, is less irritating than other fir oils. Sprinkled or sprayed about a sick room it imparts a lasting and grateful fragrance to the air, which is not oppressive and it seems to be disinfectant; or it may be thrown into a little warm water and allowed to evaporate; or it may be diffused by a steam inhaler (Dr. Lee's or Siegle's) or a hand-ball atomiser. Either of these methods may be utilised for the purpose of maintaining an atmosphere laden with pine odour as a substitute for that of Arcachon, Reichenhall, or Bournemouth. The oil can also be taken internally,

[1] The Surgical Disorders of the Urinary Organs. By Reginald Harrison. Third edition. Plate on p. 587 (from Reliquet).

and is admirably adapted for inhalation. For prolonged inhalation a few drops may be put in a suitable respirator, and will be preferred by most patients to other inhalants. For short steam inhalations ten to twenty drops may be put into any common inhaler half full of water at 150° to 160° F. and the vapour inhaled. It is, however, much better to diffuse the oil through water by magnesia, powdered silex, or prepared talc in the proportion of 40 to 60 minims of oil to a scruple of magnesia and an ounce of water. A teaspoonful of this mixture added to half a pint of cold water is to be stirred in the inhaler, and then half a pint of boiling water being added, a convenient temperature is obtained; as it cools, a little more boiling water can be added if it is desired to prolong the inhalation. This medicament will be found much milder than the vapor olei pini sylvestris (B.P.), and may therefore be employed when the official formula is found too irritating. It is a very mild stimulant to the mucous membrane, and an agreeable remedy for inhalation in relaxation, congestion, and chronic catarrhal affections of the respiratory tract. Oleum pini pumilionis is also an excellent addition to other inhalations, such as creasote and various essential oils. It disguises the disagreeable odour[1] of some and imparts its own fragrance to others. It also mixes well with eucalyptol and other inhalants. *Internally*, the ordinary dose is from one to five minims. Small doses can be taken in lozenges or on a lump of sugar, as terebine is often taken, or a mixture can be made with tragacanth &c., or larger doses may be given in capsules. In the stomach it acts as a carminative. It is quickly absorbed, and probably behaves in the blood and tissues like other terebinthinates. It is eliminated chiefly by the lungs, kidneys, and skin. It is its action on the bronchial membrane during excretion that renders it valuable in disease of this surface, being a stimulant, expectorant, and disinfectant, hence indicated in chronic bronchitis, dilatation of bronchi, bronchorrhœa, some states of phthisis, and other affections. The effect on the kidneys should not, however, be forgotten. The violet odour of the urine is produced as with some other terebinthinates, and small doses seem diuretic, but its use in diseases of the urinary passages manifestly requires care. *Externally*, sprinkled on flannel, or, better still, on spongio-piline, the oil is a cleanly, prompt, and useful stimulant and counter-irritant, and sometimes appears to possess slight anæsthetic properties.

2. *Terpin Hydrate* affords a curious contrast to oleum pini pumilionis. It has but a slight taste, is rather insoluble, has no odour, and is solid. It may be seen as small needles when it spontaneously crystallises from a mixture of turpentine and water, or may be obtained in large rhombic crystals by allowing alcohol (three parts), turpentine (four), and nitric acid (one) to stand in shallow dishes three or four days. Terpin hydrate is only dissolved in small proportion by cold water or turpentine, but is taken up more readily by hot water, alcohol, and ether. For this reason it is best given in pills or wafer paper. For small doses pills containing two grains each are convenient, and one can be taken every three or four hours. For larger doses, which should not be repeated so frequently, wafer paper is better. An emulsion may also be made, but this is not an agreeable method. The hydrate may, however, be dissolved in warm glycerine, and after solution an equal quantity of some syrup may be added. This makes a suitable linctus. From sixteen to twenty-four grains in the ounce gives two to three grains to the teaspoonful, and this dose can be taken every three or four hours. It is well to begin with these small quantities, as they are often found sufficient to affect the bronchial membrane, and they act on the kidneys. Germain Sée, Hausmann, Ferreira, Chéron, and others, have given much larger doses—ten grains, and in some cases fifteen. It is obvious that such doses might have a serious effect on the kidneys, and large quantities given to animals have been followed by hæmaturia. A dose of ten grains in wafer paper produces a feeling of fulness and heat at the epigastrium, and a sense of cerebral stimulation which in sensitive individuals may amount to giddiness. The effects of both small and large doses are analogous to those of other terebinthinates, and it is as a tasteless, odourless substitute for them that it is most useful. In restraining the cough and secretion of bronchitis, and stimulating the membrane to more healthy action, perhaps also disinfecting the sputa, it will be found useful. Germain Sée also found full doses restrain the copious sputa of some cases of phthisis, and he met with no gastric irritation after long continuance of the drug; but others have not been equally fortunate. In some instances small doses seem to increase bronchial secretion. It has also been employed successfully in hæmoptysis. Its diuretic effect has been utilised; and, in short, it has been tried in most cases in which the other terebinthinates are useful, including neuralgias. Dr. Royland seems inclined to credit hydrate of terpin with some hypnotic property, but perhaps the sleep may be attributed rather to the rapid relief to the cough, which, in the cases he reports in the *New York Medical Record*, so constantly followed the administration of the remedy.

[1] I have sometimes used oleum pini pumilionis to disguise the smell of iodoform; but the mixture should be freshly prepared, as after a few days decomposition takes place with the liberation of free iodine.

ON THE SUPRA-VAGINAL AMPUTATION OF THE CERVIX UTERI FOR MALIGNANT DISEASE.

WITH NOTES OF TEN CASES.

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AT the present day, when we meet with a case of cancer of the cervix early enough to be able to remove the whole of the obviously diseased part, *plus* a surrounding shell of apparently healthy tissue (the broader the better), the right treatment is by the operation known as the supra-vaginal amputation of the cervix. This operation is of comparatively recent origin, and is not so generally known as it deserves to be. Before it was introduced operators were content with amputating only the vaginal portion of the cervix. When we remember that the vaginal portion is only about one-third of an inch long, while the length of the whole cervix is about one inch, it will be obvious that the supra-vaginal amputation, which removes the whole cervix (and sometimes a little more than the cervix), is an operation of a far more radical nature, and enables us to deal with cases for which amputation of the vaginal portion would be useless. It is often a nice question whether a particular case is a suitable one for supra-vaginal amputation, and in doubtful cases one that can only be settled by somebody in the habit of performing the operation. When malignant disease of the cervix is complicated by pregnancy, and yet the disease has not advanced too far for the case to be suitable for supra-vaginal amputation, the best plan is to induce abortion (as in Case 10), and allow an interval of two or three weeks to elapse, so that the vascularity of the parts may be lessened. Supra-vaginal amputation of the cervix is performed as follows:—

The patient being in the lithotomy position, a vaginal douche of some efficient antiseptic—e.g., iodine water—is given. Sims's speculum is then passed, and the cervix drawn down to the vulva.

Drawing down the uterus.—For drawing down the cervix, if the disease affects both lips, it is best to use some instrument that has its hold above the seat of the disease. The volsella is not well adapted for such cases, as it is apt to break from its hold on account of the brittleness of the tissues. A single strong hook answers well. It is passed up the cervical canal till we judge it to be well above the disease. It is then made to take a firm hold, and the cervix drawn down. It is very important that the traction should be as steady as possible, when once a good hold has been obtained. Double expanding hooks of the same pattern as Emmet's, but made much thicker in the shank so as to be less springy, are also good for the purpose, and are used in the same way. When only one lip of the cervix is diseased, a volsella with a catch like Spencer Wells's forceps, placed on the healthy lip, answers well enough, but usually the hook will be found better.

Anterior incision; separation of the bladder from the supra-vaginal cervix.—The cervix is carried well back towards the perineum, care being taken to keep it in the middle line. A sound is now passed into the bladder, and the limits of the bladder towards the anterior lip of the cervix ascertained. Guided by this information, a transverse incision is made through the anterior vaginal wall. There should be at least two-fifths of an inch of healthy mucous membrane in each direction between the incisions and the

diseased area. Slightly curved blunt-pointed scissors are best for making the incisions. It is important to feel one's way frequently with the sound in the bladder during this step of the operation. There is an interval of comparatively loose connective tissue between the bladder and the supra-vaginal cervix, and when this interval is recognised most of the necessary separation can be effected with the finger. When we judge that we have cleared the cervix sufficiently in front, we proceed to the next step.

Posterior incision; separation of the peritoneum from the posterior aspect of the cervix.—The cervix is now carried well forwards towards the pubes; a transverse incision is then made through the posterior vaginal wall as close to the posterior lip as is consistent with keeping clear of the diseased part. We now dissect the peritoneum from the posterior aspect of the cervix as high as is necessary to correspond to the height to which the cervix has been cleared anteriorly. At this stage it is very likely that the peritoneal cavity will be opened, but this is not of much importance, and fear of doing it should not prevent a sufficiently high separation being made. When the disease affects the posterior lip extensively, it is indeed sometimes better, as in Case 10, to open Douglas's pouch freely, and remove the portion of peritoneum corresponding to the posterior aspect of the cervix.

Preliminary lateral incisions.—The ends of the transverse incisions should be joined by lateral incisions. These should at first be only mucous membrane deep, and, in fact, only made to indicate where the actual separation is to be made when the time comes.

To guard against hæmorrhage.—All the large vessels are situated in the lateral attachments of the cervix, as yet undivided. To avoid the occurrence of hæmorrhage when clearing the cervix laterally we may either pass a strong silk ligature by means of an aneurysm needle, or strongly curved blunt pedicle needle, round the whole of the lateral attachment, and tie it tightly *before* cutting through the lateral attachments of the cervix; or we may clamp the lateral attachment in sections with Wells's forceps—clamping a piece, then cutting between the forceps and the cervix, then clamping another piece, and so on, till the whole of the lateral attachment has been dealt with. The latter plan is the better, as ligatures are very apt to become loose when applied in this situation—probably because the parts are more or less on the stretch (owing to the uterus being drawn down) when the ligatures are being tied.

Removal of the cervix.—The cervix has now been made clear all round; to remove it we incise the anterior wall till the lumen of the cervical canal is reached. The part of it exposed should be at the level of the os internum. We now stitch the anterior margin of the stump to the cut edge of the anterior vaginal wall with silver wire. We have thus a hold on the stump. We now complete the removal of the cervix, and stitch the posterior margin of the stump to the cut edge of the posterior vaginal wall. Any Wells's forceps on big vessels may be left on for forty-eight hours. The vagina is once more douched out, and the patient sent back to bed. Frequent antiseptic douches should be used subsequently.

In the accompanying table particulars are given of the ten cases in which the writer has had the opportunity of performing this operation. It will be seen that in most of the cases the disease was not in an early stage when the patient first came under observation. All the cases recovered so far as the operation itself was concerned. It will be noticed that in two cases the operation is described as having been incomplete; only those cases are returned as complete where all the obviously diseased parts were removed, together with a surrounding shell of healthy tissue. It is obvious that the great desideratum is early diagnosis, and as the earliest symptom of malignant disease of the cervix is almost always the presence of a red discharge at some time other than the proper menstrual periods, it is evident that the mention of such a condition should at once lead to careful investigation of the whole case; and, above all, we should not be content with regarding such a symptom as menorrhagia or metrorrhagia, and treating it medicinally, but we should rather only be content to treat it medicinally, when we are satisfied the case is not one of commencing malignant disease. We are, of course, referring to the case of married women, in whom the disease most usually occurs. Several of the cases in which the disease had obtained a firm hold had been treated medicinally before coming under observation. It is noteworthy that amputation of the *vaginal portion* of the cervix would have only removed all the obviously diseased tissue in two of the cases. The superiority of the supra-vaginal amputation is obvious. Full notes are given of three of the most interesting cases in the series.

TEN CONSECUTIVE CASES OF SUPRA-VAGINAL AMPUTATION OF THE CERVIX FOR CARCINOMA.

Case.	Age.	Date of operation.	Stage of disease.	Operation complete or incomplete.	Result.	Recurrence.	Place of operation.
1	29	July 27, 1885	Moderately advanced	Complete	Recovered	Remained well for 6 months, then recurrence in the pelvis	The London Hospital
2	43	August 6, 1885	Considerably advanced	Incomplete	,,	——	,,
3	41	February 12, 1886	Early	Complete	,,	Is still quite well. (See full notes of case in text.)	,,
4	33	July 20, 1886	Considerably advanced	,,	,,	Remained well nearly 12 months, then recurrence in the pelvis at a distance from the scar, which remained healthy to the last. (See full notes of case in text.)	,,
5	39	January 7, 1887	Moderately advanced	Incomplete	,,	——	,,
6	42	March 17, 1887	Early	Complete	,,	Is still quite well	,,
7	51	April 5, 1887	Moderately advanced	,,	,,	Recurrence about 6 months later	,,
8	52	Sept. 15, 1887	Moderately advanced	,,	,,	Not seen since leaving the hospital	,,
9	65	December 6th, 1887	Moderately advanced	,,	,,	No evidence of recurrence at present	Private
10	39	Jan. 16, 1888	Considerably advanced	,,	,,	No evidence of recurrence at present. (See full notes of case in text.)	The London Hospital

In the following case (No. 3 in the table) the patient remained free from any sign of recurrence for a year and two months after supra-vaginal amputation of the cervix had been performed; then recurrence took place on the anterior part of the stump and adjacent anterior vaginal wall; this was cauterised very freely with Paquelin's cautery, and now, two years from the date of the original operation, there is no evidence of disease to be seen, and the patient is quite well.

E. H——, aged forty-one, married twice, has had two children by her first husband, but no children by the second husband (to whom she has been married fifteen years). She has never had any miscarriages. She was admitted into the London Hospital on Feb. 6th, 1886, complaining chiefly of a thick yellow discharge, which she has had for four or five years; during the last six months, however, this discharge has been coloured red at times when she was not menstruating.

On examination, a soft papillary growth was seen growing

from the posterior lip of the vaginal portion of the cervix. The area occupied by the growth was about the size of a sixpence. The growth bled readily on touching it. The sound passed a distance of two inches and three-quarters.

On Feb. 12th, 1886, supra-vaginal amputation of the cervix was performed. The piece removed was an inch and a quarter long. The patient recovered without any bad symptom, and went home. Subsequently she came up regularly to the hospital, and nothing suspicious was seen till April 25th, 1887. On examination then, I found a red patch on the scar about one-eighth of an inch wide, immediately to the left of the entrance to the uterine cavity; it had not been there previously. This was watched carefully; it gradually increased in size, and on Oct. 8th the patient was readmitted. At this time there was a papillary growth over an area the size of a florin. The growth involved the anterior part of the uterine stump and adjacent anterior vaginal wall. The edge of the growth was overhanging. Gentle examination caused bleeding, and brought away fragments of the growth the size of shot.

On Oct. 13th a careful examination under ether was made. It was found to be impossible to cut out the recurrent patch, as most of it was on the anterior vaginal wall, and cutting it out completely would have involved cutting out a piece of the bladder. The whole area occupied by the growth, together with a margin of healthy tissue round it, was therefore freely cauterised with Paquelin's cautery.

On Jan. 24th, 1888, she came up to see me. She has been regular since leaving the hospital, and has had no intermenstrual discharge of any kind. On examination I found that the ulcer caused by the cautery had completely healed, and there was no trace of disease either there or elsewhere.

In the next case (No. 4 in the table) the disease was at a more advanced stage at the time of the operation.

E. L——, aged thirty-three, the mother of six children, the last born about four years ago, and one miscarriage, which occurred four months ago, when she was six months pregnant, was admitted to the London Hospital on July 19th, 1886, complaining of having been losing blood ever since the miscarriage. The loss has never stopped more than a day or two during this time.

State on admission.—In the situation of the external os is a cavity admitting the finger as far as the root of the nail. The walls of the cavity are formed by hard tissue. Examination causes a little bleeding, and the finger on withdrawal has an offensive odour. The uterus is freely movable. Most of the excavation is in the anterior lip of the cervix, but there is superficial ulceration of the posterior lip also.

On July 20th the supra-vaginal amputation of the cervix was performed. At first sight it appeared as if the disease had extended so close to the bladder that separation would be impossible. I therefore dilated the urethra with Hegar's dilators, and held the wall of the bladder between my left forefinger and thumb while the cervix was drawn backward by an assistant; in this way the bladder was dissected off the anterior aspect of the cervix.[1] In clearing the peritoneum from the posterior aspect of the cervix, Douglas's pouch was opened, the opening being a quarter of an inch across. The operation was done at 10 A.M. Soon after its completion the patient had a rigor, and at 4 P.M. the temperature rose to 103°—the pulse, however, only being 76,—falling to 98° by 8 A.M. on July 21st. In the evening of the same day the temperature was 100·2°; after that it remained normal.

The patient left the hospital on August 17th. Her weight was then 11st. 9½lb.; November 18th, weight 12st. 2lb.; December 2nd, weight 12st. 0½lb. The patient was seen in January and March, 1887. The cicatrix was perfectly healthy and her general health good. She next came on July 16th, 1887, and complained that she was suffering from great pain in the right hip, and down the right leg. This had come on quite recently, and was preceded by numbness in the leg. The cicatrix was perfectly healthy, and the remaining part of the uterus freely movable. In the right posterior quarter of the pelvis there was felt a lump the size of a cherry, hard and fixed. There was an inch or more of healthy tissue between this lump and the uterus.

The patient was readmitted on Sept. 11th, 1887. She had continued to suffer severe pain in the right hip and leg. For some weeks past the right lower extremity had been swollen. On admission it was seen to be considerably larger than the left; great tenderness in the region of Scarpa's triangle. There was, in fact, phlegmasia dolens of the right lower limb. The scar left by the operation was still quite healthy, and the uterus freely movable; the lump in the right posterior quarter of the pelvis was, however, now the size of a walnut, but there was an interval of healthy tissue between it and the uterus. From this time she gradually went down hill, and was never free from pain, except when under the influence of morphia. She often required as many as five injections of one-third of a grain each in the twenty-four hours. On Oct. 18th she weighed only 8 st. 13 lb. On Nov. 7th a little hard nodule was noticed in the skin on the right side below the breast, freely movable over the subcutaneous structures, but adherent to the skin, which was red over it. On Nov. 14th she weighed 8 st. 5½ lb. On Dec. 20th there was left hemiplegia and facial paralysis of the left side; sensation apparently normal. The patient had not been noticed to be unconscious. She was not very clear in her understanding. On Dec. 29th she died. No post-mortem. There was never any recurrence in the scar left by the operation, nor any lump perceptible on simple abdominal palpation alone, but the lump in the right side of the pelvis became somewhat larger before her death. She had been troubled with occasional vomiting since her readmission.

The next case (No. 10 in the table) illustrates the treatment of cancer of the cervix complicated by pregnancy, the malignant growth not having passed beyond the reach of radical treatment. It also shows that Douglas's pouch may be opened freely with impunity, if proper precautions be observed.

L. E. M——, aged thirty-nine, married twelve years, has had seven children, and one miscarriage at the sixth month month of pregnancy. The miscarriage was nine months ago. A month afterwards menstruation appeared. It occurred again after an interval of three weeks, and again after an interval of two weeks. Since then she has been bleeding every few days. There have been "floodings" which last a day or two, and between the "floodings" she has had a brown watery discharge. She has had no pain to speak of. There has been no trouble with micturition or defecation, and the appetite has been good; latterly she has got thinner. She was admitted into the London Hospital on Dec. 21st, 1887. On examination, a globular swelling reaching a hand's breadth above the pubes was felt rising out of the pelvis. It may be said at once that this was the pregnant uterus, the pregnancy having advanced to about the end of the fourth month, though the patient had no idea she was pregnant. A large "cauliflower-like" mass was felt in the vagina, springing from the posterior lip of the cervix, its attachment being rather to the left of the middle line. Anteriorly the mass was attached to the cervix by a sort of spurious pedicle, but posteriorly it was continuous, without any constriction, with the posterior lip of the cervix. The growth bled very freely on touching it. The vaginal portion, where not involved by the growth, was of a purple colour.

On Dec. 29th I removed the greater part of the mass in the vagina with the écraseur, with the intention of proceeding at once to the supra-vaginal amputation; the vascularity of the parts was, however, so great that I judged it would be safer to empty the uterus first, and allow time for the involution of the uterus and vagina to diminish the blood supply. Accordingly, I dilated the cervix rapidly with Hegar's dilators, and removed the fœtus, placenta, and membranes at the same sitting; altogether the patient was about an hour under the anæsthetic. Antiseptic douches were used before, during, and after the operation, the uterus also being washed out. No bad results followed. The patient took ergotin, and had hot douches to promote involution, and on January 16th, 1888 (eighteen days after emptying the uterus), I performed supra-vaginal amputation of the cervix. I opened Douglas's pouch to an extent of about two inches in a transverse direction, and was thus enabled to get well above the disease. A somewhat quadrilateral piece of the peritoneum, covering the posterior aspect of the supra-vaginal cervix, was removed adherent to the specimen.

The interval allowed for involution to proceed before undertaking the operation must, no doubt, have diminished the blood-supply; nevertheless, at the time of the operation the parts were still very vascular. This will be evident from the fact that the patient went back to bed with three

[1] No permanent incontinence of urine resulted.

pairs of Spencer Wells's large pressure forceps, and six pairs of the ordinary size, left on. These were removed forty-eight hours later. It should be mentioned that the opening in Douglas's pouch was closed with three silver sutures. Great care was taken to do everything as antiseptically as possible, but of course the spray was not used. I am satisfied that the lines of section were in every direction made in healthy tissue. The patient had moderate fever for a few days after the operation; but after the first two days there was nothing in her condition to occasion anxiety. The sutures were removed on the tenth day.

THE GEOGRAPHICAL DISTRIBUTION OF CANCEROUS DISEASE IN THE BRITISH ISLES.

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(*Concluded from page 414.*)

Cancer in the Isle of Man.

In the Isle of Man there are no fully formed rivers, although some of the mountain streams such as the Sulby, the Dhoo, and the Glass, when they, in the latter part of their courses, traverse low-lying areas, occasionally flood the flats adjacent to their banks. The more densely populated towns and villages do not, however, come within the influence of these floods, which are only occasional and very transient. There are, however, in the north, along the great central valley, and scattered elsewhere in the interior many imperfectly drained "loughs" or "lochs," the remains of ancient lakes, in which the skeletons of the Irish elk have been found. By the gradual upheaval of the island within historic periods these loughs have been naturally drained, but in wet seasons they retain much water, and for a time resume their old bog form; bogs, however, in England and Scotland are not factors in those local climates which are coincident with a high death-rate from cancer, either among males or females. The period over which it was possible for me to extend my investigations was too short to expect any definite results, the first published report of the Registrar-General for the island bearing date 1880. However, I will give the facts as they stand for the period 1880-86 for the whole island, treating it as a registration district, without attempting to divide it into parishes and divisions, although this has been done, and the map will eventually be published in my "Introduction to the Natural History of the Isle of Man"; but the results are based upon too slender a foundation to draw conclusions from, although the facts, small in number as they are, point to the direction in which future inquiry should be made.

The mean male population of the Isle of Man (1879–86) amounted to 27,318, and the females to 27,194; whilst the deaths from cancer recorded during the seven years 1880–1884 were 89 males and 114 females; total, 203. The male death-rate would therefore be 4·65, and female 5·98. This is a most unusual combination of male and female death-rates, and occurred in England and Wales during 1851-60 in only four districts—namely: Thakeham, males 4·4, females 5·5; Ringwood, males 4·0, females 5·5; Wheatenhurst, males 4·7, females 5·4; and Machynlleth, males 4·0, females 5·0.

Ethnology has never yet been studied in relation to cancer, so far as I am aware; but this anomalous death-rate amongst a mixed Keltic and Norse community is interesting, and requires further investigation. An examination of the Keltic and Norse names of the persons who have fallen victims to this disease may afford some clue; but this part of the inquiry I have not hitherto studied, although I have the names of all who have died from this disease during the above period.

This anomalous death-rate reminds me of another instance which I lately investigated, that of Victoria, an account of which will be found in the *Australian Medical Journal* for March 15th, 1887. We have seen that in England nearly twice as many females fall victims to cancer as males. In Victoria the difference in the mortality between the two sexes is but slight; for instance, the mean annual death-rates to every 10,000 of each sex living during the years 1861–1884 were as follows: in England, males 3·78, females 6·92; in Victoria, males 4·28, females 4·52. Cancer is rapidly increasing in England and Victoria, but there is reason to think that the cause of its increase in Victoria is of such a nature as to affect those organs principally which *the two sexes have in common*. In Victoria there are no thickly populated flooded districts, like those on the banks of our rivers in England; and coincident with this fact is the one just mentioned—that the Victorian mortality from this cause is not markedly greater among females than among males.

Cancer in Scotland.

In 1887 I made an attempt to investigate the distribution of cancer in Scotland, but I found that no decennial or even quinquennial reports were issued by the Registrar-General for Scotland similar to those initiated by Dr. Farr, and therefore no data existed for studying the distribution of this disease among males and females respectively, and at different age-periods. Dr. Stark, the late Registrar-General for Scotland, issued with the census report for 1871, the cancer death-rates in each of the counties and towns. In this report, however, the deaths in the registration districts were not given, and the rates for the counties were the means for the two sexes, and not for males and females separately. It was impossible, therefore, to inquire how far the riparial districts seasonally flooded by the Scottish rivers were affected as regards this disease. One or two small counties not much larger than some of our English districts alone afforded any data within sufficiently small limits to admit of being studied at all. The county of Berwick was one, wherein were to be found all the conditions known to coexist with a higher mortality from cancer among females, if not among males; but even in this instance it was impossible to decide whether the male or the female mortality dominated the mean death-rate. On crossing the border, however, over the Tweed, and getting into the English district of Berwick, we have collateral evidence which would support the belief that the female death-rate was the cause of the high mean mortality from cancer in the Scotch county, although the death-rate from this cause was also high at the same period (1861–70) amongst the males as well. Thus: males, 4·21; females, 6·03; mean, 5·17; that for the Scotch county being 7·45. The highest death-rate in Scotland from cancer is thus associated with the most typical local climate coincident with high mortality from cancer in that country. Berwick had the lowest death-rate but one from phthisis in the same period—viz., 19·23. The highest death-rate was for Dumbartonshire 33·03, where that from cancer was only 3·83. Before giving an outline of the distribution of cancer in Scotland, I wish to call attention to a fact that will have in the near future to be studied more than it has been.

In April, 1869, I published an abstract of my paper on Cancer, which was read before the Medical Society already referred to, and in it will be found the following passage:—"Phthisis was shown to have a geographical distribution almost the reverse of cancer. The *plus* average or *blue* group of the Herefordshire cancer field, in the *phthisis* map, had the *minus* average or *red* colour; the *plus* average of blue colour of the Thames cancer field was *red* in the phthisis map, and the *red* or *minus* average districts of the north-west of England and Wales were coloured *blue*, indicative of high mortality. Again, the great south-eastern *red* group of low mortality in cancer, which *surrounded* the Thames field (the water-parting districts on oolite and chalk), had its districts coloured *blue* in the phthisis map."

More than five years after this remarkable fact was published, Dr. Stark, the late Registrar-General for Scotland, in his census report, published in 1874 a set of tables showing the death-rates from cancer and phthisis throughout Scotland at "all ages." The figures, however, unfortunately, only refer to "persons," and not to males and females separately. Dr. Stark made the following remarks on these tables: "By these tables it is seen that of the counties of Scotland Shetland was free from cancer (not quite 1·68); but it was one of the counties, on the other hand, in which the deaths from consumption were far above the average. The county of Berwick had the very highest death-rate from cancer of all the counties of Scotland, but it had a compensation in that it was the county which had the second lowest mortality from consumption. Forfar had a high death-rate from cancer, but a very low death-rate from consumption. Ayr had a very small death-rate from cancer, but a very high rate from consumption. Then take the towns, and the same want of

connexion between the two diseases will be seen. Leith was the town with the smallest mortality from consumption, but it had a high mortality from cancer, the second lowest of the towns, but a very high mortality from consumption; Edinburgh had the third highest mortality from cancer, but a very low death-rate from consumption; Aberdeen, which had a very high mortality from cancer, had only a mean mortality from consumption; and Perth, which had a high rate from cancer, had a death-rate much below the mean for consumption."

This remarkable difference in the distribution of cancer and consumption, which I first pointed out in 1868, is sufficient to warrant us in believing that there is something underlying in the causation of these two diseases which has yet to be revealed. As to the difference in the distribution, proving that these two diseases have no natural connexion, inasmuch as the localities where one is prevalent do not coincide with those of the other, we might as well say that because one species of a tribe of plants rejoices and only thrives in wet, boggy, marsh land, therefore another species of the same tribe can have no natural connexion with it because it rejoices in a dry, chalky soil. Another fact connected with this difference of distribution is that which I first pointed out in 1886 to the Collective Investigation Committee—namely, that during my inquiry as to the increase of cancer I had come across several cases in which there had been an exceptional increase in the death-rates from consumption in some districts, and that in these districts was to be found an exceptional decrease in those of cancer, the rule being throughout England that when the phthisis decreases cancer increases, and I have reason to believe that the same thing obtains in Scotland.

In discussing the distribution of cancer in England and Wales, we found that the highest mortality from this cause was associated with the principal river systems in these countries. In Scotland the river systems also claim attention in our inquiry. In the first place, it must be noted that, with one exception (the Clyde), all the fully formed rivers are to be found on the eastern side of Scotland; true it is that their sources are high up at the backbone of Scotland lying to the west, where the mountains receive annually a rainfall between sixty and eighty inches in depth, and in Inverness-shire and Argyleshire even more than eighty inches, at a point coincident with the sources of the Dee, the Don, and the Spey. The most northerly of these, and the most rapid (the Spey), has a length of ninety-five miles, and a catchment basin of 1190 square miles; that of the Don being 530 square miles, and that of the Dee 765 square miles. Now, if we examine a map of the rainfall of Scotland, such as the one constructed from the data of the Scottish Mereorological Society by Mr. Alexander Buchan, and published by Mr. J. Bartholomew, we shall find that immediately to the south-west of the sources of these rivers and to the west of that of the Tay, there is a large mountainous area receiving more than eighty inches of rain, mainly contributed by the south-westerly winds which sweep across to the north-east in the line of the rivers named. Coincident with these facts, we find in the basins of two of these rivers (the Don and the Dee) the highest death-rate from cancer in Scotland, except in Berwick—viz., Aberdeen 6·84, and Kincardine 6·83. The Spey rises in Inverness-shire, and, after traversing Elgin, falls into the sea. The death-rate from cancer in its upper course in Inverness-shire is 3·54, and when fully formed in Elgin 5·84. The river Tay has a length of ninety miles and a catchment basin of 2250 square miles, within which lies Perthshire, which is the most sheltered portion of its course. This county had a death-rate of 5·85, whilst the more exposed counties of Forfar and Fife had death-rates respectively of 5·40 and 5·10. The Forth, which rises at Ben Lomond, after traversing Stirling, washes the coasts of Edinburgh and Haddington. In the higher part of its course in Stirling the death-rate was only 3·94; in the lower in Edinburgh 4·78, and Haddington 5·64, although these two counties are more or less exposed. The Tweed comes next, with its length of ninety-six miles and 1990 square miles of basin; it has already been discussed with Berwick. Now, if we look at a map of Scotland so contoured as to leave all the uninhabited and mountainous parts above the 1000 feet level blank, but coloured below that altitude in accordance with the English map, it will be seen that all the counties on the eastern side of Scotland, which are either traversed or bounded by the fully formed rivers, are so coloured as to indicate high mortality from cancer without exception. This is in exact accordance with what was found in England; but what is wanted to complete this inquiry in Scotland is the division of the country into smaller sub-divisions, and data to determine the death-rates among the two sexes separately and at different life-periods.

Again, if we turn to the western side and examine the death-rates surrounding the one fully-formed river on this side—the Clyde,—which has a length of ninety miles from the southern uplands to the Firth, and a catchment basin of 1145 square miles, we shall find, first, that its course is along formations which in England have been associated with a low mortality from this disease—namely, the coal and the carboniferous limestone. Throughout the course of this river low mortality obtains, but a much more careful inquiry is required before any conclusions could be arrived at from the data at hand. Such is a summary of that part of the lecture I delivered before the Medical School of Edinburgh at Minto House on July 21st, 1887, as far as cancer was concerned. It must be remembered, when the high mortality among males and females is considered, that in Scotland there are no wide stretches of easily soluble calcareous rocks such as chalk, oolite, and mountain-limestone. The silurian and other rocks that assist in reducing the death-rate from cancer do so more by their physical than their chemical characters.

In conclusion, I maintain that those who would give themselves the best chance of avoiding those local conditions which are coincident with a high death-rate from cancer should study well the distribution of this disease in England. There is abundant evidence there to show that cancer does not thrive in high, dry localities, where the soil is kept sweet by the absence of floods, and the nature of the rocks which either underlie it or form its principal constituents; and that it does thrive and become very fatal where floods prevail, where their emanations are sheltered and intensified, where vegetation is killed and decomposed, and where, after the floods have passed away, a rank herbage springs up, composed of sour grass and bitter plants, which scour and otherwise disease the horses, cattle, and sheep that feed upon them. Much has to be done, much has been pointed out, and if the twenty-two high mortality and the sixteen low mortality districts were well studied in connexion with the various factors which we have seen to be coincident with high or low death-rates, I believe that much would be added, much would be corrected, and much revealed that we little think of now.

A CASE OF POST-PARTUM PEMPHIGUS.

BY JOHN WOOD, M.A., M.B. OXON.

HAVING read with considerable interest in a late number of THE LANCET a case of pemphigus recurring after four consecutive labours, reported by Mr. Octavius Crofts, I am induced to put on record a similar case in the person of my own wife, who is just recovering from a severe attack of acute pemphigus of eight weeks' duration.

On Aug. 29th last she was confined of a fine healthy child, and had for a primipara a very good time. Though somewhat delicate, she never had any serious illness, and was active and cheerful, and to all appearance in good health up till the time of her delivery, taking a fair amount of exercise daily as well as a cold bath, and enjoying her food well. All went on well till the third day, when a most intolerable itching and tingling ushered in a papular eruption of the feet and hands, commencing on the soles of the feet—small whitish points surrounded by a red areola. In a few hours this became vesicular, and by fusion of vesicles blebs were seen to form on the hands and feet. The next day bullæ varying in size from a marble to a walnut began to make their appearance on the forearms and legs, being very tense and painful, and containing at first clear serum, afterwards becoming slightly opalescent. They continued to come out in crops, each bulla lasting several days. There was marked erythema of the skin surrounding them, which spread to the neck, face, and chest, and the arms were much swollen. Several bullæ formed on the chin, where they ruptured readily, and left thick crusts, which, when detached, showed a raw-looking surface that kept on discharging. It was remarkable the rapidity with which the bullæ would form on the extremities,

attaining the size of a pigeon's egg in a few hours, so that it was necessary to prick them as they formed to prevent them becoming two or three inches in diameter. Where they were allowed to become of large size, it was found that the healing of the inflamed base was more prolonged and painful. After being pricked they continued to discharge for days, and saturated the dressings, sheets, and bedding.

The eruption appeared to reach its height and the erythema to be most acute about the tenth day, when the temperature was 103°. Dr. Totherick of Wolverhampton, kindly saw her for me at this time, and continued to attend her. He ordered small doses ($\frac{1}{10}$ gr.) of antimony in a saline mixture every six hours, and the blebs to be dressed with an ointment composed of lanolin, oxide of zinc, and liq. plumbi, with a few drops of sanitas oil. After this the disease rapidly declined, and there was extensive desquamation of the parts that had been affected, with the exception of a few small and very painful boils, which formed on the hands and feet; the body was wellnigh clear in another ten days, during which time she was able to get up and go about. Still she appeared very weak, and perspired profusely.

On Sept. 24th, when we were congratulating ourselves that she was convalescent, the same intense itching and tingling of the feet and hands returned, and were followed by an eruption in all respects similar to the previous one, only that it was much severer. The bullæ in many places became confluent, and the inflammation of the skin was most intense, compelling her to take to her bed again. As there was with this second attack much constitutional disturbance, anorexia, obstinate constipation, and continued elevation of temperature, it was imperative to take the child from the breast, the secretion of which had continued hitherto most active. Crops of bullæ continued to follow in rapid succession at intervals of a few days, so that both the upper and lower extremities were soon covered with them in various stages of development. There was a very decidedly fetid odour with the discharge, the contents of the bullæ beginning to assume a purulent character in many instances. It was necessary to dress them night and morning. Well-marked rigors occurred several days about midday, followed in two or three hours by heat and redness of the skin of the body and face. The temperature in the evening was usually about 102° or 103°, though on one occasson it reached 104°; in the morning there was always a remission, it being generally about 100° or 101°. The pulse was constantly increased in frequency, over 100, and feeble. At night the body and face were invariably flushed, the surface of the legs, chest, and back, being of a rosy-red colour and covered by cutaneous elevations or wheals resembling urticaria. The arms were swollen to double their size. From the shoulders to the finger tips the skin was raw-looking and discharging from the old blebs, and still fresh ones were being formed, giving the appearance exactly of one extensive scald. The legs and feet were much the same. The mucous membrane of the nose was affected, as also inside the umbilicus. After the erythema of the body subsided, it was succeeded by a dry, scaly condition of the skin, though around the neck it appeared almost eczematous in character. The second attack seemed to reach its height at the end of the fourth week, or seventh from the commencement, and then began to decline, fewer blebs coming out each day, and the old ones healing over. They continued to come, however, two or three each day, and there was great bodily weakness. The same treatment was prescribed by Dr. Totherick as in the first attack, and the antimony was persevered in for a week, but without any appreciable benefit. As there was considerable anæmia, we decided to give a drachm of vin. ferri with six minims of liq. arsenicalis three times a day, and five grains of quinine once a day about midday. This was continued for more than a week, the arsenic being increased by two minims every third or fourth day till it reached ten minims, when, as there appeared to be a greater extension of the dermatitis, it was entirely discontinued for a week, during which the sulphide of calcium in quarter-grain doses every four hours was employed on account of the purulent tendency of the discharge. After a week it was thought advisable to go back to the arsenic, four-minim doses, in combination with the tr. cinchonæ flav.; this was continued for some time, and appears to have proved more beneficial than anything else. Two wineglassfuls of port wine have been given daily.

With regard to local treatment, we found, after trying several different external applications in the shape of ointments and powders for dusting, that nothing proved so soothing as the ordinary carron oil on lint and covered with absorbent wool. Cocoanut oil was very useful in allaying the itching dependent upon the erythema of the body, and calamine lotion seemed to suit the hands and fingers best when they were most painful and inflamed.

The convalescence has been protracted, and followed by falling off of the hair in large quantities, and more or less cutaneous anæsthesia of the plantar surfaces of the feet.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

TUBERCULAR DISEASE OF THE KIDNEY SIMULATING MALIGNANT DISEASE; NECROPSY; REMARKS.

(Under the care of Mr. HOWARD MARSH.)

THE difficulty as to diagnosis which was met with in this case before the use of the aspirator is one which does not frequently occur, and it must be remembered that from the presence of some irritation, such as a calculus, malignant disease may be present also, though masked by the general character of the tumour. The remarks which Mr. Marsh has appended to the case fully discuss its unusual character.

Louisa G——, aged forty-six, a laundress, was admitted into Hope ward under the care of Dr. Andrew, on Sept. 7th, 1886, with a swelling in the right lumbar region. She is a married woman with children; general appearance pale, but not cachectic; very emaciated. For two years she had lost flesh. Three months ago she noticed a tenderness in her right side, and then discovered a swelling in that situation. It had greatly increased in size since first noticed. The urine was natural in appearance and quantity. She had never been jaundiced. For the last twelve months she had been subject to sudden attacks of pain in the hypogastrium, followed immediately by micturition. On these occasions she voided, as a rule, only small quantities of urine, which was apparently healthy. Micturition had been for some time frequent, usually about once in an hour, sometimes three or four times in an hour. The bowels had acted after almost every meal for the last year. She remembered no previous illness.

Condition on admission.—Occupying the right side of the abdomen, extending from just below the ribs to the crest of the ilium, and from within two inches of the middle line to the loin, there was a tumour, rounded in shape, well defined in outline, slightly movable, apparently of firm consistence, and over the greater part of its extent dense and hard. Posteriorly there was an indistinct sense of elasticity, but nothing like fluctuation could be detected anywhere. The patient complained of pain when firm pressure was made over the swelling. The intestines could not be felt in front of the tumour. The edge of the liver could be distinctly felt, extending over the surface of the tumour to about its middle. Urine: sp. gr. 1013; acid; trace of albumen; no sugar.

The diagnosis was very doubtful, but the tumour was thought to be in all probability of a malignant nature. On Sept. 21st. Mr. Marsh was asked to see the case, and he also thought it was malignant disease. But to guard against the possibility of error, at Dr. Andrew's suggestion, he introduced an aspirating needle where the tumour was less firm than elsewhere, with the result that eight ounces of pus escaped. This caused, however, scarcely any perceptible diminution in the size of the tumour, and there still remained a large, very hard, and distinct swelling. After aspiration the general condition improved very slightly. Frequency of, and pain on, micturition diminished. Evening temperature generally between 99° and 100° F. On Sept. 24th pus was found in the urine to the extent of an eighth on settlement.

Sometimes slightly better, sometimes much worse, the

patient went on week after week gradually losing strength, and becoming extremely emaciated. Towards the end of October she suffered from hypostatic congestion of the bases of the lungs and some bronchitis, attended by a very troublesome cough, with a great deal of expectoration. Frequency of micturition continued, and the urine contained about one-tenth of pus. It was several times determined to make an exploratory incision in the loin, but the patient was so weak that this operation could not be ventured upon. On Nov. 30th the aspiration wound opened, and about six ounces of pus escaped. It continued to discharge for two or three days, and then closed again. The patient did not seem relieved by this outflow. On Dec. 24th considerable œdema of the legs was noticed. During January, February, and March, 1887, the patient gradually lost ground, and she died on April 12th.

On post-mortem examination general chronic peritonitis with adhesions was found, especially on the right side. Liver, spleen, and intestines natural, except that on the surface of the former organs were about a dozen small calcified nodules, which possibly were old tubercle. The left kidney weighed seven ounces; healthy. The right kidney was firmly adherent to the intestines and to the vertebral column by dense fibrous tissue, which enclosed the renal vessels and also involved the vena cava. It was filled with soft caseous matter, which was quite inspissated and evidently very old. The organ itself was reduced to a series of cysts, which opened into a distended pelvis, all being equally blocked by caseous matter. The ureter was thickened for about four inches, and contained a little thick pus. Round the gland there was a small collection of pus, situated chiefly at its back part and in close contact with it. This collection communicated with the old aspiration wound in the loin. The abscess cavity was bounded on one side by the duodenum. Close to the kidney was an old calcareous gland. The bladder and pelvic viscera were quite healthy.

Remarks by MR. MARSH.—The main interest in this case lies in the illustration it affords of the difficulty there may be in distinguishing between abscess of the kidney and malignant disease. The swelling was of such hardness and apparently solid density that its physical characters, while they accurately resembled those constantly met with in malignant tumours, were unlike those usually present in an abscess, especially in a large abscess of the kidney, in which generally fluctuation, or at least elasticity, can be readily detected. Another feature pointing to malignant disease rather than to abscess was the almost completely fixed condition of the swelling. Of course a kidney that is the seat of a new growth may remain to some extent movable when pressure is exerted upon it; while, on the other hand, a kidney involved in chronic inflammatory changes may become firmly matted down to surrounding parts. The mere fact, therefore, that an enlarged kidney is fixed or that it is movable is not necessarily evidence in the direction of malignant disease. Yet here, though there was still some slight mobility, the tumour gave the same impression that is often felt in malignant swellings in the side of the neck and elsewhere—an impression as if wide infiltration had occurred between the tumour and the neighbouring structures, blending them into one general mass, so that the tumour was rooted on a hard and extended base. The fact, too, that the urine was healthy seemed a strong indication against the presence of suppuration in the kidney. That no pus made its way along the ureter into the bladder seems to have been due to the fact that the renal calyces and the pelvis of the ureter were blocked by inspissated pus of old standing. It may, however, have been due to the circumstance that the swelling overlapped and so pressed upon and obstructed the commencement of the ureter. That pus was found in the urine in considerable quantity soon after the swelling was aspirated may be explained on the supposition either that when resecretion of pus occurred the pus was thinner and so was able to percolate through the old caseous material into the ureter, or that the aspiration, by partially emptying the swelling, left the ureter free from pressure. Another deceptive feature was the absence of any material rise or daily variation of temperature. For several weeks the temperature was never raised more than about one degree, and as the patient was subject to bronchitis this slight rise was attributed to the lung affection. The case is but another warning that, in many instances, the evidence to be obtained as to the nature of abdominal swellings by an external examination is not to be depended upon. Widely different diseases may present exactly the same features. There is thus far nothing to distinguish the one from the other; the only safe course is to explore the swelling itself, either, in appropriate cases, by the aspirator needle, or by laparotomy and the direct examination of the tumours by the hand passed into the abdominal cavity. In the course of the case two or three consultations took place on the question whether any further treatment ought to be adopted. It was discussed whether a free incision and drainage would be an advantage, and whether any more radical method should be followed. No incision was made, for it could not be ascertained that any further collection of pus had taken place, and the patient had neither pain nor any material rise of temperature. Her feeble condition, and the chronic bronchitis from which she suffered, rendered her quite unfit for an operation of any magnitude, so that the idea of removing the kidney could not be entertained. The post-mortem examination showed that no interference of whatever nature would have availed to save the patient's life.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

CASES OF SUPRA-PUBIC LITHOTOMY; REMARKS.

(Under the care of Dr. K. M'LEOD.)

THE notes of these cases have been supplied by Assistant Surgeon Khagendra Nath Sen, M.B.

CASE 1. *Supra-pubic lithotomy.*—B——, a Hindu male, aged thirty-five, had suffered from symptoms of stone for two years, and on two occasions passed small calculi. A stone was readily detected by the sound, and also felt per rectum. It was discovered with unusual ease and distinctness above the pubes through the abdominal wall, and this circumstance suggested the supra-pubic as the preferable operation. The rectum was thickened and somewhat contracted, apparently from syphilis, though this was denied. The urine was turbid, alkaline, and contained an excess of mucus and phosphates. Owing to the state of the rectum no attempt was made to distend it. Eight ounces of bichloride of mercury lotion (1 in 4000) were injected into the bladder after it had been emptied by means of a catheter, and a tape was tied round the penis to prevent the escape of the fluid. A vertical incision about three inches in length was made above the pubic symphysis. The muscles were cautiously separated, and the surface of the bladder reached by scraping upward with the nail of the forefinger from behind the symphysis. When the surface of the bladder was laid fully bare, it was steadied by a sharp hook, transfixed, and divided in the middle line by a scalpel from above downwards. The stone (phosphatic) was found to be very friable, and broke down under the forceps into several fragments, which were removed, and the bladder thoroughly washed out. It was found to be fasciculated and pouched. A soft catheter was tied in, and a wide drainage tube inserted through the wound, which was not stitched. The catheter was removed in twenty-four and the tube in forty-eight hours. Urine escaped freely by the wound, being caught in a vessel as the patient lay on his side. The bladder was washed out daily with glycerine of borax lotion (one drachm to the ounce). During the first month the urine escaped entirely through the supra-pubic wound. As the wound contracted, the discharge took place in increasing quantities through the urethra. No symptom causing any anxiety arose during his convalescence, and his health was greatly improved by diet and tonics. He was discharged fifty-two days after the operation. The fragments which were collected weighed fifteen drachms.

CASE 2. *Prostatic and vesical calculi removed by median and supra-pubic lithotomy simultaneously.*—E——, a Mahomedan male, aged twenty-five. Has had symptoms of stone for thirteen years. During the last month and a half he has had great trouble in passing urine. He is a healthy man and well nourished. There is increased frequency of micturition, and the act is performed with great pain and difficulty. The urine is ammoniacal, and contains an excess of phosphates. On sounding, a large stone is found to occupy the prostatic urethra, impeding the passage of the sound into the bladder. The stone can be very distinctly felt by rectal examination. The patient was placed in the lithotomy position, the perineum divided in the middle line, and a stone weighing 3 dr. 49 gr. easily removed from the dilated prostatic urethra by means of a lithotomy forceps. On introducing the finger into the bladder a large stone was found to occupy its cavity—too large to be crushed or extracted

through the perineal wound. Accordingly, the bladder was at once opened above the pubes in the manner described in the preceding case, and a stone weighing 6 oz. 11 gr., and measuring 3 in. by 2¼ in. easily removed by forceps. A large drainage tube was inserted through the supra-pubic wound and brought out through the perineal wound. This was retained for some days. The progress of the case was quite satisfactory, and the patient left hospital after a stay of sixty-three days, with both wounds soundly healed and able to pass urine naturally.

CASE 3. *Supra-pubic lithotomy.*—K——, a Hindu male, aged twenty, passed a small calculus in childhood, and has suffered from symptoms of stone ever since. He came to the hospital on account of retention of three days' duration. The bladder was relieved by means of a catheter, and two small calculi were removed by a urethral forceps from the bulbous portion of the urethra. He now passed urine in good stream, but very frequently, and his bladder was found to be inflamed and very irritable. After a few days' treatment he was chloroformed and carefully examined. The urethra was found to be narrowed at the meatus and bulb, and the bladder firmly contracted round what seemed to be a large stone, which appeared to be encysted. The bladder was opened above the pubes, in the manner described in Case 1, the sound being retained as a guide. One stone weighing about six drachms and several fragments were removed by forceps and scoop, and the cavity washed out. The bladder was extremely contracted, and the stone was firmly held by it. A soft catheter was tied in, and a large drainage tube inserted into the wound, which was not stitched. The catheter was removed in two days, and the drainage tube in nineteen days. The bladder was washed out daily with glycerine of borax lotion (one drachm to the ounce). He began to pass urine after twenty-seven days, and was discharged forty-seven days after operation with the wound quite healed, and the function of micturition restored to its normal state.

Remarks by Dr. M'LEOD.—The operation of supra-pubic cystotomy is a very easy one, and, as far as my limited experience goes, very safe. By working close to the symphysis, in the pre-vesical space, and stripping the loose cellular tissue of this region off the surface of the bladder with the finger, so as to displace the peritoneum with a good covering of subperitoneal tissue upwards, there is no risk of cutting or otherwise injuring that membrane. I have repeatedly verified this statement on the dead body. Distension of the rectum was not employed in any of these cases. In one of them the bladder has been emptied in consequence of a previous perineal section, and in the last case both rectum and bladder were as empty and contracted as they could be. The great objection to the operation is the prolonged detention in hospital—fifty-two, sixty-three, and forty-seven days in these three cases. When therefore no special reason exists for opening the bladder above the pubes on account of the size of the stone or the desirability of obtaining the more direct access to the interior of the bladder which this operation affords, I incline to think that some form of perineal section is preferable. Of course a crushing operation is preferable to either in suitable cases. In none of the cases was there any unhealthy action in or around the wound, nor any constitutional disturbance of consequence.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Annual General Meeting.—President's Address.

THE annual general meeting of this Society was held on Thursday, March 1st, Mr. G. D. Pollock, F.R.C.S., President, in the chair. Dr. Clement Godson and Mr. H. Butlin were appointed scrutineers of the ballot.

Dr. CHEADLE read the report of the President and Council, which showed the continued prosperity of the Society, the number of Fellows at the present time standing at the highest point reached since the foundation of the Society.

The report of the Honorary Librarians stated that the additions to the library during the year 1887 consisted of 460 works, including pamphlets, but not including transactions, journals, and other periodical publications. Of these additions, 165 had been obtained by purchase and 295 by donation. The latter included fifty-three volumes presented by Dr. Wickham Legg. The total number of works in the library, December, 1887, was 30,742. During the past year 3694 books had been borrowed from the library, and the number of visits of Fellows had been 4574. The collection of portraits of members of the medical profession had been enriched by the addition of sixteen, and two oil paintings had been presented to the Society by Dr. R. J. Lee.

The PRESIDENT then read his address, which consisted principally, as is customary, of obituary notices of deceased Fellows of the Society. Amongst these were Sir George Burrows, a former President of the Society; Dr. Wilson Fox, the late honorary librarian, Dr. Arthur Farre, Dr. Alfred Meadows, Mr. Quain, and Professor von Langenbeck. Referring to the succession of Mr. Quain by seniority to the presidential chair of the Royal College of Surgeons, he said that many Fellows of the College thought this custom, which might still be said to be in vogue, would be more honoured in the breach than in the observance. He then drew attention to the valuable contributions of Mr. Rickman Godlee, Mr. R. W. Parker, and Mr. Haward, on the treatment of cases in which kidney complications required the assistance of the surgeon; to the interesting communications of Mr. Rivington, Mr. Jacobson, and Mr. Barwell on the Removal of Urinary Calculi by the Supra-pubic Operation; of Dr. Vivian Poore, on Writers' Cramp and Impaired Writing Power; of Mr. Knowsley Thornton, on Splenectomy; of Mr. Malcolm, on the Condition and Management of the Intestine after Abdominal Section; of Dr. Cheadle and Mr. Thomas Smith, on a case of Occlusion of the Left Bronchus; of Mr. Walsham, on Intra-peritoneal Rupture of the Bladder; and of Mr. Arthur Barker, who showed two successful cases of Trephining for Cerebral Abscess. For the future, the subjects of cancer and tubercle, amongst others, afforded abundant material for research, and would well reward the time and attention devoted to their investigation, and he trusted it was not too much to hope that someone hereafter might be able to point to the sure and successful treatment of one or both of these maladies.

Dr. William Wood proposed, and Mr. Willett seconded, the adoption of the report of the Council.

Mr. Edmund Owen proposed, and Dr. Day seconded, the vote of thanks to the President for his address.

Mr. H. T. Butlin proposed, and Mr. R. W. Parker seconded, the vote of thanks to the retiring President.

Mr. Timothy Holmes moved, and Dr. Myers seconded, the vote of thanks to the retiring secretary, Mr. Howard Marsh.

Dr. E. A. Sansom moved, and Dr. Coupland seconded, the vote of thanks to Mr. Holmes, the retiring treasurer.

Dr. Buzzard moved a vote of thanks to the retiring vice-presidents and members of Council, Dr. W. H. Dickinson, Dr. W. Ogle, Mr. A. E. Durham, Dr. J. Cavafy, Sir Thomas Crawford, Dr. J. Payne, Dr. Cooper Rose, Mr. M. Beck, Mr. J. McCarthy, and Mr. C. S. Tomes.

The following gentlemen were unanimously elected to act as officers during the ensuing year:—President: Sir Edward Henry Sieveking, M.D. Vice-Presidents: Sir Andrew Clark, Bart, M.D., F.R.S.; James Andrew, M.D.; Sir Henry Thompson; Thomas Smith. Treasurers: C. J. Hare, M.D.; J. Ashton Bostock, C.B. Secretaries: W. Butler Cheadle, M.D.; J. Warrington Haward. Librarians: S. Jones Gee, M.D.; J. Whitaker Hulke, F.R.S. Other members of Council: William Cayley, M.D.; Sir Joseph Fayrer, K.C.S.I., M.D., F.R.S.; T. Lauder Brunton, M.D., F.R.S.; R. Douglas Powell, M.D.; Arthur Ernest Sansom, M.D.; R. W. Parker; W. Johnson Walsham; H. Trentham Butlin; Henry Morris; Edward Tegart.

PATHOLOGICAL SOCIETY OF LONDON.

Epithelioma in a Calculous Kidney.—Villous Carcinoma of Breast.—Villous Papillomata and Contact Carcinoma of Bladder.—Renal Disease.—Acute Necrosis.—Osteitis Deformans.

AN ordinary meeting of this Society was held on March 6th, Sir James Paget, F.R.S., President, in the chair.

Mr. SHATTOCK exhibited for Sir William MacCormac a case of Epithelioma of the Kidney associated with Calculus. The growth was not of the glandular type usual in malignant renal tumours, but was a true epithelioma, and probably due to the irritation of the calculus. The stone, by continual friction, had prepared a spot on which the cancerous

infective material had planted itself. This view of its causation lent increasing probability to the germ theory of the causation of cancer, though recent experiments in Berlin had confirmed the observation that it was impossible by the methods at present employed to cultivate any sort of organism from cancerous tumours. That this negative evidence did not prove the absence of a microzyme was shown by the parallel instance of actinomycosis, where, though a parasite was undoubtedly present, no one had yet succeeded in cultivating it in artificial media.—Mr. WALSHAM alluded to two specimens in St. Bartholomew's Hospital Museum of stone associated with cancer, and considered these cases a powerful argument for early interference in cases of suspected calculus.—Dr. NORMAN MOORE referred to the similar origin of cancer of the gall-duct from calculous irritation.—Dr. WILKS believed that in cases of associated cancer and stone of both gall-bladder and kidney the cancer was secondary, and Frerichs confirmed this opinion.

Mr. BERNARD PITTS showed a specimen of Villous Carcinoma of the breast removed from a lady aged fifty-three, who had noticed a lump for three months which had given her no inconvenience. It was hard, solid, and situated at the lower edge, non-adherent to skin or deeper structures; the nipple was not retracted, nor were there enlarged glands. Expecting it to be a scirrhus, its removal was advised. On section of the tumour the central part was prominent, soft, and like a melanotic sarcoma; it was oval, with an imperfect capsule connected with the breast structure. Mr. Shattock reported the tumour to consist of processes invested with epithelium, with cells, at some places columnar, in others spheroidal; there was recent infiltration of blood. He classed it as a villous carcinoma, and referred to cases by Messrs. Godlee, Pollard, and Butlin which closely resembled his own in every way. In Mr. Godlee's case the tumour was recurrent, and a gland was infected in the axilla, whilst Mr. Butlin's was recurrent without glandular enlargement, and thus more resembled a sarcoma. Probably the clinical history of villous carcinoma was different from the ordinary form.—Dr. WILKS inquired how the disease was described by the older writers.—Mr. BOWLBY said that Mr. Butlin's case had not recurred, nor was there any gland deposit. It would probably be necessary later to revise the nomenclature of these growths.

Dr. NORMAN MOORE exhibited two specimens of Renal Disease. The first was a case of congenital narrowing of both ureters, with dilatation of the kidneys, and perinephritic inflammation due to injury, in a patient aged twenty years, who was in St. Bartholomew's Hospital under his care. Ten weeks before admission he was kicked in the left inguinal region, and six weeks afterwards noticed a large tumour in the left hypochrondrium, which projected close to the left lobe of the liver, and on aspiration yielded three pints of urine. A fortnight later several pints of urine were suddenly passed, and the tumour diminished in size; but soon filled again, and was tapped three times more. Mr. Walsham then operated on the tumour, and a drainage tube was tied in; suppression of urine, however, supervened, and a few days later the patient sank. Post-mortem examination revealed a cyst occupying the whole left side of the abdomen, the colon being depressed to its lower edge; its wall was adherent to the diaphragm, and showed much inflammatory tissue. The right kidney was much dilated, and both ureters became narrowed just before entering the pelvis of the kidney, the opening being valvular. The bladder, urethra, and heart were normal. Microscopic examination of the kidney showed parenchymatous inflammation, and on the left side enormous thickening of the capsule; the arterioles were not thickened. He remarked that the dilatation was probably gradual and due to congenital smallness of the orifice of the ureters. The second case showed advanced chronic interstitial nephritis in a man aged thirty-nine, who was also under his care in St. Bartholomew's Hospital. Here the left ventricle was hypertrophied, the heart weighing twenty ounces. In the right kidney were some rounded calculi. Twenty-three years before his death the patient had a stone removed from his urethra after having had retention of urine for three days. He was dropsical at the time, and was always weakly afterwards. Twelve years later he was in the Royal Free Hospital for chronic interstitial nephritis, and eight years later still in St. Bartholomew's for the same disease. It seemed probable that his nephritis commenced with the retention due to stone twenty-three years before his death. Although he had previously passed calculi, he never did so after the one which caused the retention. His occupation allowed him to take care of his health. A similar case was recorded by Oppolzer, lasting twenty-three years.—Mr. J. R. LUNN quoted the case of a man with hypertrophied left ventricle and blockage of one ureter following an attack of hæmaturia seventeen years previously.—Dr. MOORE, in reply, did not think hypertrophy of the left ventricle was usually found with only one damaged kidney. In such cases he found on microscoping the apparently healthy kidney evidence of early interstitial nephritis.

Mr. HURRY FENWICK brought forward Statistics of Sixty Cases of Villous Papilloma of the Bladder from different sources, showing the varying conditions which might be encountered by the surgeon in dealing with these growths. In point of sex, the males were affected thrice as often as the females, a proportion which was found to hold good in a series of 634 cases, which embraced all varieties of vesical growth. With regard to the specimens brought forward, 60 per cent. were those of single papillomata, and 40 per cent. were multiple. The single papillomata were found to be growing in 43 per cent. of cases from the right uretal orifice, while only 26 per cent. were noted arising from the left. The following conclusions were submitted: 1. That 86 per cent. of the single growths were found in the inferior zone of the bladder, originating at either side of the trigone, and, if invading that region, certainly did not start there. 2. That they were pedunculated, or tended to become so, in the proportion of two to one. 3. That with regard to multiplicity of the growths, it was important to recognise the fact that many might be present in the same bladder. Thus, in 80 per cent. of the multiple series the growths were found to vary from three to twenty-two in number in the same viscus. 4. That villous papillomata were rarely situated in diverticula. 5. That carcinoma might exist in the same bladder with benign growths in the proportion of 10 per cent., which would be an important factor in surgical treatment of these cases. He also brought forward specimens to prove that carcinoma might propagate itself by contact, several of these showing growths on both sides of the bladder, where the walls would obviously be in contact when that viscus was empty, and he submitted that these proved his point, although it was going against the opinion which had been expressed by Sir James Paget in his Morton lecture last year.—The PRESIDENT said the number of cases recorded of cancer propagated by contact was so small that it was almost coincidental. He had never seen cancer of the tongue infect the cheek, nor cancer of the lower lip infect the upper, nor did cancer of the lower eyelid produce disease in the upper, or cancer of one finger produce disease of the contiguous side of the next. These negative instances predominated so immensely over the few positive cases that we were driven to conclude that the latter were mere coincidences.—Dr. GOODHART had seen many suspicious instances of production of cancer by contact, as, for instance, disease of opposite sides of the stomach, growths starting from portions dropping into Douglas's pouch, or the extensions of growth along the Fallopian tubes to the uterus.—Sir JAMES PAGET desired to distinguish between cancer by embolus and cancer by contact.—Mr. BRUCE CLARK thought from mechanical reasons that cancer in the bladder by contact should be commoner than elsewhere.—Mr. BOWLBY quoted an instance where one vulva had become infected by contact with a growth on its fellow.—Dr. COUPLAND gave cases illustrating cancer by contact in the serous membranes, pleura, peritoneum, and arachnoid.—Mr. SHATTOCK referred to a case where the opposite vocal cord was affected by contact in a case of carcinoma of the larynx.—Mr. FENWICK, in reply, said he had some strong evidence of carcinoma by contact. Lücke, in Billroth and Pitha's Handbuch, gave a case where cancer of the tongue gave rise to contact growth in the cheek. In another instance the opposite vaginal wall had become so infected, and there was an excellent specimen in the museum of the Middlesex Hospital of sarcoma of a diverticulum producing secondary growth by contact.

Mr. A. Q. SILCOCK showed bones removed from a case of Osteo-myelitis; the patient was also present. The disease had apparently started in isolated inflammatory foci situated at the line of junction of the epiphysial cartilages with the diaphyses of the tibia, and terminating in acute necrosis. The patient was a girl aged eleven. Tenderness at the head of the left tibia and tumefaction of the soft parts were first

noticed; no pus was found on incision, but some appeared on the following day. A few days afterwards pain and tenderness were observed over the right tibia, and a small quantity of pus was evacuated by free incision of the periosteum in the neighbourhood of the epiphysial line. Next the inner malleolus on the right side was affected; here it was subsequently ascertained that a small focal abscess just above the epiphysial line existed; then the inner malleolus on the left side became affected. Both knee joints became full of fluid, the right knee joint had to be laid open, and eventually the right thigh was amputated. Subsequently the whole of the diaphysis of the left tibia was removed piece by piece; but the amount of new bone formed was slight, as was anticipated, looking to the severe damage which must have been done to the osteogenetic layer of the periosteum by suppuration so acute, intense, and widespread. The patient ultimately made a fairly good recovery so far as her general health was concerned. A longitudinal section of the right tibia showed that the inflammatory process was focused at the upper and lower ends of the diaphysis in the region which French authors had called juxta-epiphysial, or, as Mr. Silcock proposed to term it, para-epiphysial. The symmetry of the bony lesions implied a morbific condition of the blood; a deterioration of quality, associated perhaps with a coccus, accompanying the lowered vitality of the patient. The para-epiphysial regions in long bones and the sutural edges of the flat bones of the face and skull were peculiarly liable to become affected, probably because the physiological balance was here easily upset by strain or other injury or exposure to wet or cold, the circulation being slow and the vitality of the cells of the part easily exhausted.—Mr. SHATTOCK said that it had been recently shown that when pathogenic and non-pathogenic organisms were injected into the blood stream they lodged in the liver, spleen, and marrow of bones. In Mr. Silcock's case organisms might have found their way to the osseous medulla, and some irritation might have started them into activity.

Mr. H. H. CLUTTON showed a drawing of a case of Osteitis Deformans in a woman of fifty-six. The left ulna was first affected, then the right radius, next the left humerus, and then the lower extremities; the latter were curved outwards and forwards, and the femora and tibiæ were thickened. The dorsal spine was much curved and fixed, and she had lost seven inches in stature. The circumference of the skull had considerably increased, and now measured twenty-two inches. He desired to draw attention to the asymmetry of the lesions of the upper extremities. The ages of most cases recorded corresponded to the period when chronic osteitis most frequently developed, and the varying conditions found in the latter disease would account, he considered, for all the phenomena of the affection under consideration.

The following card specimens were shown:—

Mr. SHATTOCK: (1) Osseous Ankylosis after Gouty Disease; (2) Gouty Deposit in Bone.

Mr. TREVES: (1) Fibro-cellular Tumour of Spermatic Cord; (2) Horny Tumour of Mouse, developed from a Dermoid Cyst.

Mr. MANSELL MOULLIN: Syphilitic Crania.

Mr. W. S. COLMAN: Diphtheria of Fauces and Larynx, with Acute Inflammation of Peyer's Patches.

Mr. CLUTTON: Long-standing New Growth of Skin, probably Sarcoma. (Living specimen.)

Mr. LEOPOLD HUDSON: Tubercular Ulceration of Intestine, associated with the Presence of Foreign Bodies. (Recent specimen.)

MEDICAL SOCIETY OF LONDON.

Annual General Meeting.—Cerebral Abscess.—Relations of Gastric Ulcer.—Arterial Pressure in Bright's Disease.

THE annual general meeting of this Society was held on Monday, March 5th, Dr. J. Hughlings Jackson, F.R.S., President, in the chair.

The report of the Council was read by the retiring secretary, Dr. S. West; it showed that both financially and generally the Society maintained its flourishing condition. The reports of the treasurer and of the librarian were read and adopted. For the ensuing year the officers nominated by the Council and published in our last issue were unanimously elected.

Dr. DAVID FERRIER and Mr. VICTOR HORSLEY contributed a paper on the Successful Treatment of a Cerebral Abscess in connexion with Otitis Media. Cases of Dr. Gowers, Mr. Barker, and Dr. Greenfield were quoted, as also two other cases, all of which were instances of cerebral abscess successfully treated by operation. The case under consideration was that of a skilled artisan, who was taken ill in November, 1887, with drowsiness, pain over the head intensified by percussion, and photophobia. There was a discharge from the left ear, which commenced a week after the onset of the symptoms. He had at first no motor or sensory paralysis, and the temperature was normal. He at first improved under a saline mixture and small doses of mercury, but afterwards got gradually worse, becoming temporarily delirious and showing signs of aphasia. On admission into the National Hospital for the Paralysed and Epileptic, there was found a spot on the skull, tender on percussion, situate just in front of a vertical line drawn through the external auditory meatus at about the junction of the third and lowest fourths of the distance between the meatus and the sagittal suture. This spot corresponded with the superior temporo-sphenoidal convolution opposite the lower border of its middle third—i.e., vertically under the lower end of the fissure of Rolando. There was at the same time almost complete motor aphasia, marked paresis of the right side of the face, and less marked paresis of the right upper limb, especially of the hand and digits. In both discs there was intense optic neuritis, with hæmorrhage into the right; this was explained, as in the case of Dr. Gowers and Mr. Barker, by the close proximity of the abscess to the optic tract. A T-shaped incision was made, the junction of the limbs of which corresponded with the painful spot; the exposed bone was doubtfully yellow in appearance. An inch disc of bone was removed, and the dura was found congested, bulging, without pulsation, and of dark purplish colour. On opening it, œdematous brain bulged out, and on introducing a trocar and cannula, six drachms of pus were discovered at a distance of one centimetre from the surface; it was creamy and inodorous. After evacuation a drainage tube was inserted, the wound closed and dressed with boric acid powder, carbolic gauze and sal alembroth wool. The wound united by the first intention, the temperature mounting to 101° F. on the second night, then falling to normal, and remaining so. The tube was left out on the thirteenth day, and the wound had soundly healed on the twenty-fourth after the operation. The genesis of the abscess was singular, for the acute otitis media seemed to have commenced only three or four weeks before the abscess arose. Further, here was a rapidly developed abscess of considerable size situated high up above the roof of the tympanum (with an inch of brain substance intervening), and yet the pus, though of course infective, showed no sign of decomposition. The localisation was fairly easy in view of the paresis and neuritis, coupled with the tender spot, the pain of which was not continuous with that felt in the meatus.—Sir WILLIAM DALBY thought the time was approaching when in these cases helpless despair would be replaced by hopeful expectancy. He referred to his paper at the Clinical Society six years ago, classifying eighty cases of death after ear disease.—The PRESIDENT considered the cases interesting as showing recovery from optic neuritis without the use of drugs.—Dr. BRISTOWE considered the absence of febrile symptoms was in favour of abscess. In inflammation of the cerebral sinuses there were usually rigors, with rise of temperature. In the case of the latter affection he noticed inflammation along the jugular vein.—Mr. JAMES BLACK quoted a case of Dr. MacEwen's of successful trephining for cerebral abscess.—Dr. KINGSTON FOWLER said that in both Mr. Hulke's cases the site of pain as a localising symptom proved erroneous. At the necropsies no signs of inflammation were found along the track of the exploratory punctures.—Dr. FERRIER, in reply, regretted tha he had overlooked MacEwen's case. He considered that intra-cranial operations nowadays were attended with so little danger that even if there were doubt as to the diagnosis he would recommend surgical exploration.—Mr. HORSLEY, in reply, wondered how far optic neuritis was of value as an initial symptom in these cases. In one case he trephined for cerebellar abscess, but failed to find pus; there was, however, abscess of the lateral sinus. He thought it would be better in all cases, where one failed to find cerebellar abscess, to examine the lateral sinus, and, if necessary, ligature it and turn out the pus and clot.

Dr. ORD read an interesting communication on some curious relations of Gastric Ulcer. He gave the notes of the case of an unmarried woman aged twenty-six, who was admitted into St. Thomas's Hospital in December, 1887, with symptoms of gastric ulcer and extreme anæmia. After her admission certain signs of heart affection, present at the time of her admission, underwent further development. Dr. Ord stated in detail the grounds upon which he founded the diagnosis of the existence of pericarditis and endocarditis. The patient had no pyrexia, and there was no history of previous acute rheumatism. The coexistence of the symptoms of gastric ulcer with those of pericarditis and endocarditis had already been noted by Dr. Ord in three cases, and a remark made by Dr. Buzzard at a recent meeting of the Royal Medical and Chirurgical Society, to the effect that he (Dr. Buzzard) had come to think that acute rheumatism was the effect of irritation of the medulla oblongata had deeply impressed him. When, therefore, the coincidence of the signs of gastric ulcer with those of cardiac inflammation had been observed in at least four cases, the occurrence appeared to be worthy of serious thought. Several explanations were forthcoming. First, was it possible that in an anæmic person with over-sensitive pneumogastric nucleus gastric irritation (well known to be capable of producing cardiac disturbance) could be capable of producing cardiac lesion? Second, could pneumogastric irritation be the common cause of gastric ulcer and cardiac inflammation, the pneumogastric irritation being determined by excitation proceeding from the uterine organs in a person already anæmic and prone to active reflex disturbance? Third, was it possible that both sets of symptoms might be disorders of nutrition arising out of anæmia? Anæmia was known to have as an association optic neuritis. Might both the ulcer and the cardiac inflammation be disturbances of nutrition, parallel or equivalent to optic neuritis? Dr. Ord cited a case at present under his care in which the signs of gastric ulcer, of cardiac inflammation, and of optic neuritis were present in conjunction with extreme anæmia. He also cited a case recently under his care in which myocarditis had been observed post mortem as one of the associations of pernicious anæmia. On the whole, Dr. Ord was inclined to regard the curious combinations of lesions noticed as disturbances of nutrition consequent on anæmia, and appealed to the members of the Society for any information they could give on this, to him, interesting subject.—Dr. MACLAGAN referred to a case in which a lady of fifty, after a sudden profuse gastric hæmorrhage, developed an endocardial murmur with a slight rise of temperature; in a second case a neurotic patient subject to gastric irritation developed an apex systolic bruit. He demurred to Dr. Ord's diagnosis of gastric ulcer in his cases, as there was no other symptom but gastric hæmorrhage.—Dr. COUPLAND said that, without post-mortem examination, he would hesitate before he concluded cardiac inflammation was present.—Dr. J. K. FOWLER referred to Dr. Stephen Mackenzie's paper on Apepsia Nervosa and its relations with Gastric Ulcer, as illustrating the difficulty in diagnosing the latter affection. The diagnosis of organic from hæmic cardiac bruits was often only possible by awaiting the result of treatment.—Dr. BENHAM inquired if the pericarditis could arise by extension.—Dr. ORD, in reply, trusted pathologists would in future, in cases of gastric ulcer, examine carefully both the endocardium and myocardium.

Dr. BROADBENT read a paper on the Prognostic Significance of the Blood Pressure in Acute Renal Disease. He said that though high arterial tension was present in almost every form of kidney disease, yet he had twice seen low tension when symptoms of renal cirrhosis were present. In acute renal dropsy, when the pulse beats were short and easily arrested, it indicated temporary dilatation and weakness of the left ventricle; from this the heart afterwards recovered. A continued defect of tension might be due to persistent cardiac weakness, and this latter was of unfavourable prognostic import; in other cases it indicated diminished peripheral resistance, and this also was of bad augury. He quoted the case of a carman of sober and steady habits, who was admitted into St. Mary's Hospital with acute renal dropsy of four days' duration. His mother had been of intemperate habits, and he had undergone privation two years previously, but no exciting cause of the attack could be found. He had swelling of the face, scrotum, and extremities, a bad cough, and solid, albuminous urine, containing epithelium and casts. The temperature was subnormal; the pulse 64, short and weak. The first cardiac sound was short, the second weak, and there was extension downwards of dulness. Dr. Broadbent pointed out that the most certain cause of albuminuria was the languid movement of blood in the renal capillaries, and the indication here was to improve the circulation. Under a mixture of iron, sulphate of magnesia, nux vomica, and digitalis the dropsy diminished, the pulse became of better volume and not so compressible, and the albumen diminished to a little more than a trace. The patient was allowed to get up too early, and this brought about a temporary increase in the albuminuria. The imperfect development of blood pressure showed the nature of the patient's constitution, and might be made use of in prognosis. It indicated a long illness and the necessity of the use of vascular stimulants. Dr. MAGUIRE said that Dr. Broadbent, by drawing attention from the renal condition to the circulatory system, had led the way to rational treatment. He had found cases of high tension best relieved by calomel and salines, those of low tension by nux vomica and iron.

CAMBRIDGE MEDICAL SOCIETY.

A MEETING of this Society was held on Jan. 6th, Mr. E. Carver, F.R.C.S., in the chair.

Note on Subcutaneous Nodules in the Hand.—The PRESIDENT read a short paper on this disease occurring in rheumatic individuals. His remarks were based on two cases which had somewhat recently come under his notice. The patients were gentlemen on the shady side of fifty; each was rheumatic, dyspeptic, and somewhat gouty. The nodules were found on the palmar aspect of the hand near the head of the metacarpal bone of the index finger, and near the joint between the first and second phalanx of the same finger, and sometimes of the other fingers. In one of these cases the inner side of the thumb was the seat of the little nodule. The nodules were painful only on pressure, and fixed to the deeper textures, but unattached to the skin, which preserved its normal healthy condition. In the one case the nodules disappeared under treatment by alkalies and colchicum; in the other case the nodule diminished under alkaline treatment. Both cases showed evidence of gout in the contracted finger, and enlargement of the phalangeal joint.

Cases of Abscess in the Tibia.—Professor HUMPHRY related two cases of this disease. A girl aged fourteen was admitted into Addenbrooke's Hospital suffering from severe pain in the upper third of the tibia, worse at night. There was some thickening at this part of the shaft, and extreme tenderness. There was a scar of an old incision which had been made some time ago at this spot, the history dating back from a blow received some years back. An incision was made through the periosteum, but no pus appeared. The bone was then perforated and matter came out, and, after chiselling, a considerable cavity was found deep in, lined with soft membrane and full of thick pus; this was syringed out and plugged. Great relief followed, and the wound was now healing. The other case was a middle-aged woman who suffered violent pain, and had extreme tenderness in a similar situation. There was slight thickening, and the skin was red and œdematous. After a poultice the pain subsided. An incision was made and pus escaped; a small hole was found in the bone, into which a probe could be passed, and matter came out. The treatment was the same as in the former case, and recovery rapid. Professor Humphry said these cases presented the ordinary symptoms of abscess in bone, but were situated rather lower down than usual. He remarked on the length of the previous history of the symptoms in these two cases.

Wound of Palmar Arch; Abnormal Blood-supply.—Mr. WHERRY related the history of an innkeeper's wife, a stout middle-aged woman, who broke a glass bottle with great violence into the palm of the hand. The surgeon in attendance had tried all the usual means for stopping hæmorrhage; pressure, pads, flexion, elastic bands, exploration under chloroform. These were successful always for a time, but always eventually a bleeding burst out; so that during four weeks there were six considerable and sudden losses of blood. When Mr. Wherry first saw the hand—it was a month after the accident—the fingers were becoming gangrenous, and the general condition of the patient was feeble and anæmic. Amputation of the hand was followed by a good recovery. On examination of the removed portion, the hand was greatly swollen, finger tips black; a large traumatic

aneurysm in the palm, full of clot and pieces of glass; the sac formed by thickened tissues around. A large ulnar artery communicated with the sac, and no deep arch formed by the radial existed. There was no deep or communicating branch from the ulnar artery passing between the little finger muscles. The small representative of the radial appeared to communicate with the wounded palmar arch by a branch passing through the second interosseous space. This absence of the deep arterial arch, with the enlargement of the superficial (ulnar) supply in the hand, is (according to Quain) the most uncommon of abnormalities, and may explain the great difficulty in controlling the hæmorrhage, and also explains the ready tendency to gangrene of the digits in a large flat hand.

Englargement of the Prostate.—Mr. GRIFFITHS showed a specimen of this disease removed from a patient who died in Addenbrooke's Hospital, under the care of Dr. M'Alister. He was an elderly man, and was semi-comatose when admitted. His urine contained a small quantity of albumen; attacks of uræmic convulsions came on, and he died comatose. The heart was hypertrophied, and the ureters and pelves of the kidneys much dilated. The third lobe of the prostate was remarkably enlarged and prominent, and there was a saccule in the bladder. The other organs were healthy.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Jan. 19th, Dr. de Bartolomé, President, in the chair.

Mr. PYE-SMITH showed a man aged thirty-nine, in whom six months ago he had divided the right spinal accessory nerve for severe convulsive wry-neck. The movements had almost entirely ceased, enabling the man to resume work. The sterno-mastoid and trapezius were much wasted.

Mr. SNELL introduced the following patients: 1. Man with chancre of upper eyelid (healed). 2. Man with piece of steel in lens for nineteen years, lens remaining clear except at the situation of foreign body (encapsuled) at the posterior part; vision was good; the case was described in the *Ophthalmic Review* of 1884. 3. Staining of conjunctiva with nitrate of silver.

Myxœdema.—Mr. W. MAKEIG JONES (Wath) showed a case of myxœdema in a married woman aged fifty. The disease had been gradually coming on for four or five years, but it is not two years since the slowness of speech and general swelling of the skin were noticed. The symptoms were: great anæmia, with limited rosy patches on both cheeks, centre of forehead, and lips; swelling of cutaneous surfaces, which did not pit on pressure; commencing atrophy of both optic discs; pupils sensitive to light; systolic basic bruit; exaggerated patellar reflex; urine about a pint in twenty-four hours—sp. gr. 1014 to 1020, full of phosphates, but not albuminous (it contained albumen eighteen months ago); pulse 48 to 60; temperature in mouth, 96°; general lethargy; slowness of speech, and stammering; slowness of movement and sensation; unpleasant taste, but not smell. The thyroid could be felt, and was larger, especially left lobe, than in women of the same age. The hands had the characteristic spade-like appearance. Although speech was slow, she could read fluently.

Laparotomy.—Mr. PYE-SMITH related a case of successful laparotomy for acute intestinal obstruction, caused by a Meckel's diverticulum, of the ileum, in a boy aged thirteen. The operation was performed at the end of the fourth day of obstruction, and at the first action of the bowels, twelve hours later, a piece of the fin of a fish was passed, which had presumably been the exciting cause of the obstruction. In spite of an attack of pneumonia, the lad did well, and was quite convalescent in three weeks' time.

Colotomy.—Dr. GWYNNE gave the notes of a case where he had performed left colotomy for obstinate constipation of several months' standing, relieved by occasional attacks of diarrhœa. The patient was a woman aged forty-six, unmarried. The case gradually got worse, with great distension of the abdomen and frequent vomiting. All the usual remedies failed to give any relief, and a fatal result appearing imminent an operation was decided upon. The result was favourable, and the patient now enjoys good health, a year and a half after the operation. There was no history of syphilis. The pain was always referred to the left groin, and since the operation she occasionally suffers from pain in the same region.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Feb. 8th, Mr. Ross Jordan, President, in the chair.

Dr. SUCKLING showed a case of Ataxia in a brass worker. The patient was a man aged fifty-four, who for many years had worked at bronzing. During the past eighteen months he had suffered from numbness of the feet and hands and unsteadiness of gait. He had suffered also from attacks of vomiting and shooting pains in the legs. He was unsteady in walking, especially in turning round, and static ataxia was marked, for he could not stand with his eyes shut, swaying about and falling on closing them. The pupils were unequal, and responded to light and accommodation; there were no changes in the fundus oculi. There was no decided anæsthesia or analgesia of the extremities, but he stated he felt as though he was walking on wool. The knee jerk was diminished, but could readily be elicited by Jendranek's method. The man gave no history of syphilis, but there were pigmented scars on the legs. There was no green mark on the teeth, and he had not suffered from attacks of sweating and catarrh. Dr. Suckling pointed out that ataxia with numbness of the extremities had been observed by Schloehow in workmen at zinc foundries, the ataxia being due to loss of muscular sense. The muscular sense in the above case was decidedly impaired, for he was unable to distinguish any weight less than 4 oz. suspended from the toes, and he could not distinguish between a 4 oz. and an 8 oz. weight. He had decidedly improved under the use of iodide of potassium.

Dr. SUCKLING also showed some specimens of Trichocephalus Dispar.

Mr. JORDAN LLOYD showed a specimen of Papilloma of the Bladder, removed from a man, aged fifty-one, by suprapubic incision. The first symptom was slight hæmaturia, with clots, occurring idiopathically, and during perfect health, more than two years before. He remarked on the diagnosis of bladder tumours, and thought that spontaneous hæmaturia with clots, recurring in an apparently healthy man beyond thirty-five years of age, from time to time, without vesical symptoms of any kind, and without any objective evidence of other disease, ought to suggest to us the presence of vesical papilloma. Such growths could often only be discovered by supra-pubic incision, which ought to be performed in preference to perineal incision.

Dr. HOGBEN showed specimen of Cirrhosis of Liver in a young child due to alcohol.

Mr. BRACEY read a note on the Treatment of Tinea Tonsurans by Hot Oil.

Dr. HOLMES JOY read a paper entitled "Notes on Puerperal Septicæmia."

PLYMOUTH AND DEVONPORT MEDICAL SOCIETY.

Treatment of Whooping-cough.—Paralysis from Peripheral Neuritis.

AT a meeting held on Feb. 20th, Mr. G. JACKSON, F.R.C.S. (in the chair), opened a discussion on the Treatment of Whooping-cough, and stated that he had found lobelia and belladonna, if given early, cut the disease short, while vaccination was of temporary benefit.—Mr. WILSON advocated the use of bromides and belladonna, or, if chronic, change of air.—Dr. BAMPTON preferred to treat the disease on general principles, but considered that chloral and carbolic acid, in virtue of their sedative and antiseptic properties, had particular value.—Mr. J. E. SQUARE had had good results with inhalation of creoselene.

Dr. BAMPTON read a paper on Paralysis from Peripheral Neuritis, illustrating his remarks by the recital of a case of rheumatic origin. The patient had pain and weakness in the legs, followed by loss of power and numbness; slight swelling of feet, and darting, agonising pains in the shins, which no medication relieved. There was no suspicion of alcoholism. The patient always felt cold. There was loss of power and sensation in the right hand, and afterwards in the left. Absence of knee jerk; no eye symptoms. The patient succumbed to an intercurrent attack of bronchitis, to which she was subject. Another case was that of a female of intemperate habits, aged thirty, who had gradual loss of power in the lower extremities for some months. When seen, the patient complained of pain in the neck,

head, and knee-caps, and shooting pains in the shins. The legs, hands, and lower portion of the abdomen were numbed and anæsthetic, and felt icy cold. The temperature did not reach 95° F. Pulse imperceptible at wrist. Heart's action steady; sounds pure. Respiration laboured and thoracic; pupils dilated, and sensitive to light; internal squint of left eye. The patient had delusions, but was sensible when spoken to. Knee jerk absent; face dusky; urine dark and scanty; motions offensive and dark-coloured. She vomited at times; took no food, only gin and old ale. Tongue pale and clean. The patient seemed to improve under coffee and strychnine, but died unobserved, whilst sleeping, in the early hours of the morning. Dr. Bampton threw out the suggestion that possibly cases of infantile paralysis were primarily of peripheral origin, caused by acute rheumatism. It was notorious that acute rheumatism in children of a tender age was often unnoticed or not diagnosed; and yet one would expect infants, from their want of clothing, to be most liable. The initiatory stage of infantile paralysis was also generally wrapt in obscurity. Acute rheumatism in infants was most rapid in onset, active in acting on the inflammable sensitive infantile tissues, and fleeting in duration, passing over them like a blighting east wind over budding grass in spring. The pain of multiple swollen joints must have a great effect on the unstable nerve system of infants.—Mr. W. WOOLCOMBE considered that the embolic theory explained the phenomena of infantile paralysis. — Dr. BAMPTON said that the embolism, if present, might be due to the action of the rheumatic poison on the blood, and suggested that in the initiatory stage of infantile paralysis salicylate of soda should be given, relating a case where convulsions impended that responded at once to the drug.

Reviews and Notices of Books.

A Short Manual of Surgical Operations. By ARTHUR E. J. BARKER, F.R.C.S., Surgeon to University College Hospital, Assistant Professor of Clinical Surgery in University College, London. With 61 Illustrations. Pp. 425. Longmans, Green, & Co., London and New York. 1887.

AT the outset we may remark that the above-named work is a valuable acquisition to the records of operative surgery, for, besides giving the author's own views and experiences, it is at once a simple, clear, and fairly complete compilation and collation of operations that have been introduced or revived during the last few years. It was not to be expected that the whole field of operative surgery could be described in detail, as that would have been impossible in a book of moderate dimensions like the present. Necessarily, therefore, the author has been hampered for space with so much material to dispose of. The difficulty has been, however, very creditably handled, and, on the whole, it may be said that little of importance has been omitted and nothing trivial included.

In the opening chapter Mr. Barker lays down some useful rules regarding the preparation and preservation of sponges, ligatures, &c. A brief survey is then made of the modes of dressing recent wounds, the author giving a decided preference for the dry methods. Whether his general recommendation of leaving operation wounds free from inspection for several days *from the time of their infliction* will meet with the acquiescence of the majority of surgeons is, perhaps, doubtful; but his own practice seems, at least, not to have suffered from the plan he has largely adopted.

The older and simpler operations of surgery, both major and minor, are concisely related, but we cannot help feeling that the descriptions are too much in the narrative form—that is to say, not sufficiently directive. Several sections have undoubtedly received full consideration, and those especially treating of operations practised on the tongue and kidney are examples of terse, concise, and withal complete exposition.

The chapter devoted to operations on the nerves must be admitted as meagre, and we cannot help saying to some extent misleading; meagre, inasmuch as no mention is made of the surgical treatment of the fifth nerve; indeed, the only two particularised are the sciatic and facial. Thus, whilst a column and a half of type is devoted to stretching of the facial nerve, the gustatory, supraorbital, &c., go unnoticed. Surgeons who have had much experience of nerve suturing will complain of the defective treatment of the subject by Mr. Barker's pen. We hope in a future edition to see this chapter rewritten. Operations of comparatively rare performance, such as pylorectomy, cholecystotomy, cholecystectomy, trephining for cerebral abscess and tumours, and the osteoplastic operations on bones, are described in a manner worthy of all praise.

The diction of the work leaves nothing to be desired. The type is excellent, and the illustrations do great credit to Mr. Barker's skill as a draughtsman. We may draw attention to the fact that in several of the earlier figures in the book there are no indicator lines connecting the letters with the objects to which they refer. The faults in the work alluded to above are easily remediable, and, in spite of them, we must express our admiration of the way in which Mr. Barker has accomplished his task. The book is destined to be popular, and will doubtless soon reach a new and revised edition.

OUR LIBRARY TABLE.

Three Hundred and Eighty-four Laparotomies for Various Diseases. By JOHN HOMANS, M.D., Surgeon to the Massachusetts General Hospital. Boston: Nathan Sawyer and Son. 1887. — Dr. Homans' little book mainly consists of tables showing the leading facts about each case, including the subsequent history of the patients. But these tables are prefaced by a short *résumé* of the author's experience in abdominal surgery during the last fifteen years, and further particulars of some of the more important cases in the tables. A perusal of the book impresses us not only with Dr. Homans' skill and large experience in this branch of surgery, but also with the care with which the tables have been prepared, and the extreme candour with which the cases are discussed. He is almost too ready to acknowledge his own errors, and certainly shows no desire to take credit even for his most brilliant operations.

Operative Surgery on the Cadaver. By JASPER JEWETT GARMANY, A.M., M.D., F.R.C.S., Attending Surgeon to Outdoor Poor Dispensary of Bellevue Hospital, &c. New York: D. Appleton and Co. 1887.—This is a guide to surgical operations. Its merit lies in its clearness of diction and the avoidance of redundancy in descriptions of alternative methods and procedures. Its demerit is the absence of illustrations. In teaching such a subject as operative surgery a single good illustration is often worth pages of description. Those who know how to operate will not much miss the illustrations; but learners, for whom this book is obviously chiefly intended, will seriously miss them, and we would strongly advise Dr. Garmany at once to remedy the defect.

Brain: a Journal of Neurology. Edited for the Neurological Society of London by A. DE WATTEVILLE. Parts 39 and 40. London: Macmillan and Co. January, 1888.—This is a double number, the publication of the October issue having been deferred owing to the illness of the editor. It is, however, not merely rich in pages, it is exceptionally good in matter. Every one of the articles it contains is of more than passing interest. To begin with, there is the text of a paper on Muscular Hypertonicity in Paralysis, by Dr. Hughes Bennett, which is excellent as a clinical study of an anomalous state; and appended thereto is the discussion which ensued on the reading of the paper at the Neurological Society, in which Drs. Hughlings Jackson,

Buzzard, Ferrier, Hale White, and Donkin took part. Dr. Ross contributes a suggestive paper on the Segmental Distribution of Sensory Disorders, which is especially to be studied in respect to visceral neuralgiæ. Of Professor Schäfer's article on Experiments on Special Sense Localisations in the Cortex Cerebri of the Monkey we have already spoken. Dr. W. Thorburn gives an excellent account of Injuries of the Cauda Equina, illustrated by cases personally observed and collected from published records. Dr. Hack Tuke writes upon "Folie à Deux"; Dr. Alex. Hill upon the Grouping of the Cranial Nerves. Mr. Bland Sutton adduces facts and reasons in support of the Primary Common Origin of the Central Nervous System and Alimentary Canal; and Dr. Byrom Bramwell describes a Ready Method of Preparing Large Sections of the Brain. There is a goodly number of clinical cases, and the usual careful abstracts and reviews.

The Quarterly Journal of Microscopical Science. Edited by Professors RAY LANKESTER, THISELTON DYER, KLEIN, MOSELEY, and SEDGWICK. Vol. XXVIII., Part 3. London: J. & A. Churchill, February, 1888.—This number contains the following articles. 1. The Photospheria of Nyctiphanes Norvegica, by Rupert Vallentin and J. T. Cunningham. This is shown to be a pigmented body strongly resembling an eye in structure, but giving forth instead of receiving luminous rays. 2. On the Early Stages of the Development of a South American Species of Peripatus, by W. L. Sclater. 3. On the Anatomy of Allurus tetraedrus (a genus of worms), by Frank E. Beddard. 4. The Development of the Cape Species of Peripatus (Part 4), by Adam Sedgwick. 5. On the occurrence of numerous Nephridia in the same Segment in certain Earthworms, and on the Relationship between the Excretory System in the Annelida and the Platyhelminths, by Frank E. Beddard. 6. The Anatomy of the Madreporaria, by G. Herbert Fowler. The part is illustrated with eleven plates.

Zeitschrift für Biologie. Von W. KÜHNE und C. VOIT. Band 24, Heft 3.—This part contains the following articles:—1. E. Stadelmann: The Formation of Ammonia from Fibrin in Pancreatic Digestion. 2 and 3. Dr. R. Neumeister: Remarks on the Chemistry of Albumose and Peptone; and on the Introduction of Albumose and Peptones in the Organism. 4. W. v. Knieriem: On the Influence of Cellulose in sparing Albumen in the Diet of Herbivora. 5. Dr. W. Cameron: The Nitrogen of Urea, and the total Nitrogen in Human Urine. 6. Dr. Krüger: On the Unequal Resistance of the Colouring Matter of the Blood in different Animals to the Influence of Decomposing Agents. 7. Dr. Pfeiffer: On the Titrimetric Estimate of Urea. 8. Dr. J. Rutgers: Have Vegetable Albumens the same value as Animal Albumens as a Diet for Man? The question of the difference of cost between the vegetable and mixed diet is stated to rest entirely upon the cost of heating the oven. The mean value given by Moleschott for the daily food is not too low for the climate of Middle Europe.

Journal de l'Anatomie et de Physiologie. (G. POUCHET.) Année xxiii., No. 6; November and December, 1887.—The contents of this part are:—1. E. Wertheimer: Recherches Expérimentales sur les Centres Respiratoires de la Moëlle Epinière. 2. R. Kochlen: Documents pour servir à l'Histoire des Echinorbynches. 3. H. de Varigny: Recherches Expérimentales sur les Fonctions du Cœur chez le Carcinus mœnas. Discours de M. Georges Pouchet sur l'Inauguration de la Statue de Belon.

Tables of Universal History, Literature, Science, and Art, from A.D. 200 to 1888, and of American History, Literature, and Art. By JOHN NICHOL, M.A. Oxon., LL.D. Fourth Edition. Glasgow: J. Maclehose and Sons.—This edition has been enlarged by additional columns giving the names and dates of medical and other scientific authors and of mechanical inventions. We cannot do more here than call attention to the re-issue of this work, the appreciation of which by students of history, as well as by teachers and writers in general, is rendered evident by the fact of three editions having been exhausted. One glance at its elaborate pages is sufficient to show its great value and the amount of labour bestowed on its compilation.

Schedules for Throat and Nose Records. By SCANES SPICER, M.D.—These forms for systematically recording observations and results of treatment in affections of the throat and nose, including adjacent associated areas, are certainly useful, being chiefly of a time-saving value, but also reminding the recorder of the necessity for examining carefully every part of the region under examination. H. K. Lewis of Gower-street is the publisher, and the forms should command a ready sale; the price for 100 separate blank forms is 7*s.* 6*d.*

MILK AND DISEASE.

ON Thursday, March 1st, Dr. G. SIMS WOODHEAD gave a lecture on the above subject at the Parkes Museum, of which the following is an abstract.

The lecturer said that milk, a typical food, contains all that is necessary for the growth of the tissues; and not only for those of the higher organisms, but also for the growth of micro-organisms, all necessary elements being present in an easily assimilable form. Various forms of fermentation and other changes were brought about in milk by growth, proliferation, and development of different forms of micro-organisms—namely, lactic acid fermentation, butyric fermentation, alcoholic (Koumiss) and ropy fermentations. Changes in colour by a kind of colour fermentation were brought about by micro-organisms, as in blue milk and red milk. Not only these, but pathogenic, organisms can grow in this splendid nutrient medium. In this way we may account for the spread of diphtheria, scarlatina, typhoid fever, summer diarrhœa, tuberculosis, anthrax, &c. Bacilli have been demonstrated to be the cause of two of these diseases, and it is very probable that others are similarly caused. These bacilli can grow in milk, and so milk may be a medium for their distribution and of the spread of disease. The lecturer gave examples of dissemination of scarlet fever in St. Andrews and Edinburgh by milk from infected farms or dairies, and described channels by which milk may be infected. Milk is the one animal food which in this country is not cooked, and even when an attempt is made to cook it this is done imperfectly. Tuberculosis in children frequently commences in connexion with the alimentary tract and the glands associated with that area; sometimes it is confined to this tract. The probability is that virus has been introduced along with food-milk. Koch and Baug record experiments in which milk from tuberculous cows produced tuberculosis in animals inoculated or fed with it. These have been repeated, and always with the same result, if the udder of the cow affected has been tuberculous. The lecturer alluded to cases which had come under his own observation, and diagrams of the bacilli in position in the epithelial cells lining the milk ducts were exhibited. Dr. Woodhead had found tubercle bacilli in milk in six out of nearly 600 samples examined along with Professor McFadyean, of the Royal Veterinary College, Edinburgh. He pointed out, however, that, though tubercle was so common in cattle, the udders are comparatively rarely affected; but when they are, the milk is a great source of danger to delicate children. Compulsory remedies and notification of disease in dairies and dairy farms, if not elsewhere, were insisted upon, as well as the appointment of medical and veterinary inspectors, and careful and frequent inspection of farms and dairies, cattle and cattle owners, &c.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY. The annual meeting of the governors of this institution was held at Cardiff on the 29th ult. The report, which was unanimously adopted, showed a balance against the hospital of £483. During the past year the number of in-patients was 1124, an increase of 130 as compared with the previous year; and of out-patients 9161, an increase of 1671.

THE LANCET.

LONDON: SATURDAY, MARCH 10, 1888.

TO OUR SUBSCRIBERS AND READERS.

WITH reference to a statement made in error by an evening contemporary last week, to the effect that THE LANCET was "about to change hands," we take this the earliest opportunity of giving our most emphatic assurance that THE LANCET is not, and has never been, for sale, but remains the property of the family of the Founder.

As the statutory day approaches — the "day following Palm Sunday," on which the Fellows of the Royal College of Physicians meet to elect a President for the ensuing year,—the importance of the event gains in intensity. It is now definitely decided by Sir WILLIAM JENNER that he would not accept re-election to the Presidency, and we have authority to make this announcement. He has more than earned that repose which he is known to covet from the troubles and anxieties of so responsible a station. The Fellows, desirous as they well may be that Sir WILLIAM should continue in office, cannot reasonably expect him to do so, and therefore they must make up their minds as to whom they deem fittest to succeed him. In so doing they may be mindful of the progress which the College has made during the past seven years — a progress which is largely owing to the guidance of their President. It is not too much to say that the College has become rejuvenated, for during the whole period it has taken an active—indeed, a leading—part in the reform of medical education. Its work is not yet complete, and in some particulars it may have been marred by a too punctilious regard for its own dignity (as, for instance, in the rejection of the union with the Apothecaries' Society); but there is ample ground for the assertion that the septennate of Sir W. JENNER'S presidency will be remembered for the emergence of the College of Physicians from the isolated position of an ancient corporation to become the recognised leading medical institution in this country. Its influence in all questions of medical learning has been proportionately extended, so that it may be said in truth to have never in its whole history occupied so proud a position as now.

We need but glance through the history of the College since 1881 to prove that this is so. In that year before the Medical Acts' Commission, the College gave in its adhesion to the proposal for a Conjoint Board, which, if it had been constituted, would have practically amounted to the suspension of its own licence-granting powers. This act of self-denial proved in the end abortive, owing to the withdrawal in 1884 of the Medical Acts Amendment Bill, which had been framed with the object of granting a "one-portal" licence. During this time the College was not idle. In 1881 it improved its own examinations, and was rewarded by attracting more candidates for its licence; and in 1882 commenced the series of conferences with the College of Surgeons, which eventuated two years later in the constitution of the Conjoint Examining Board for England, a step of the highest moment for the cause of medical education. The union was, it is true, not made a permanent one, but that the Colleges considered it was tantamount to being so was seen in their speedily deciding to erect an Examination Hall, on the Victoria Embankment, the inauguration of that work in 1886 by Her Majesty proving the firmness of the bond which had been made between the two Colleges. Quite recently the decision to erect buildings in connexion with this Hall, to be devoted to the investigation and exposition of medical science, has further cemented the union. But, perhaps, of even greater importance to medical education, and certainly to London as a school of medicine, has been the movement on the part of the Royal Colleges to obtain powers to grant degrees in medicine. Into this movement Sir W. JENNER has thrown himself with characteristic zeal and energy. He recognised clearly the injustice under which the London students were labouring, and it is not too much to say that his powerful advocacy went far to outweigh the opinions of those who, from the standpoint of the College, felt that the innovation would overturn its long-established order, or of those who deprecated what they termed the degradation of a university degree. There can be no question that many of these objections were fanciful, and were easily overborne by the patent fact that London students had a decided grievance, which could not be remedied by the existing University. The question was first raised in the College, in 1884, by the late Dr. WILSON FOX, who with the late Dr. MOXON was amongst its foremost advocates. The Colleges moved but slowly, and it was not till last year that the scheme was finally formulated. Meanwhile another movement had taken place to supply London with a Teaching University, in the Medical Faculty of which the Colleges would hold a chief place. The rest is well known; and whatever be the outcome, it must not be forgotten that the credit of first putting into practical shape the desire to give medical degrees to the London student emanated from the Royal Colleges. In so doing they had the support of most of the medical teachers; but it may in truth be said that it was not contemplated by the majority that the degree should be granted on the same conditions, as to preliminary or as to final study, as a mere licence to practise. If, then, the Colleges should fail to get what they ask, they will yet have done a great deal to advance the question, and it would be neither to their interest, nor to that of medical education, that they should be excluded from a wider and more perfect constitution which a real University in London would afford.

In dwelling thus upon the educational movements in which the College has taken part during the years of Sir W. JENNER'S presidency, we ought not to lose sight of the other functions which the College has performed with greater vigour and conscientiousness than ever before. It has expressed its opinion regarding such laxities of professional conduct as consultations with homœopaths, advertisement of medical works in the public press, and the contribution of medical articles to lay journals. In these delicate matters the College has been guided by the upright judgment and sterling common sense of their chosen head;

and every Fellow, senior or junior, has felt the force of his straightforward declarations. We can well imagine, then, that the Fellows will part from him with reluctance, so amply has he maintained the standard of truth and honour in professional dealings. It is a great thing for any body of men to have a leader who is respected by all for his integrity, for his influence permeates the whole mass. The President of the Royal College of Physicians of London is the acknowledged head of the British medical profession, and to him therefore do its members look for an example in all that relates to their professional duty.

Since, then, the Fellows must reluctantly abandon any hope of securing Sir W. JENNER'S services for another year, they are likely to feel embarrassment in their choice of his successor. Amongst the senior Fellows doubtless there are many who possess qualities which would fit them for the office, and who would carry on the work of the College, which has now grown to such importance. The mode of election is, however, remarkably calculated to prevent a unanimous vote; and, where there are several names thought of, the recourse to a second ballot is imperative, the choice then lying between the two who have received the highest number of votes on the first ballot; but any name may be written down on the first ballot, and no one knows whether the Fellow in question will serve or not if elected. There is one name which will, we are sure, be uppermost on this occasion; and there are many Fellows, doubtless, who would wish to know if that gentleman would consent to serve the office for the ensuing year. He is known to have declined it before; but when we consider the service he has rendered to the College during the whole of his life, there will be no objection in any quarter to his being pressed to reconsider his resolve. We allude, of course, to Sir HENRY PITMAN. He has held the office of Registrar since 1858, when it may be remembered the Medical Act was passed. Under this Act the General Medical Council had to appoint a Registrar. Dr. FRANCIS HAWKINS, who was at that time Registrar of the Royal College of Physicians, was elected to the newly created post. This caused a vacancy in the registrarship of the Royal College of Physicians. Dr. MAYO, who was at that time President, inquired of Sir HENRY (then Dr.) PITMAN, whether, if elected, he would accept the appointment. This led to Dr. MAYO nominating him, and his subsequent unanimous election. Thus it will be seen that for some thirty years he has held this very responsible office, and has thereby been the first lieutenant and trusted adviser of the following Presidents of the College: Dr. MAYO, Sir THOMAS WATSON, Sir JAMES ALDERSON, Sir GEORGE BURROWS, SIR JAMES RISDON BENNETT, and during seven years Sir WILLIAM JENNER. Dr. PITMAN (who received the honour of Knighthood in 1883) was elected physician to St. George's Hospital in 1857, having previously for some years served as assistant physician. At the time of his appointment he lived in Gloucester-place, and was in considerable consulting practice. With this, however, we believe, the duties connected with the registrarship seriously interfered. We can well understand that a position requiring his daily attendance for two or three hours at the College would very considerably interfere with his practice as a physician. In 1876 our readers of that period will remember that some of his College friends made an attempt to make him President at the election of that year. At the second ballot he lost the honour by only three votes, and we believe that it was against his own wish that he was nominated on that occasion. Notwithstanding Sir HENRY'S ripe age, he is in robust bodily and mental health. Although advanced in years, he is practically younger than many of those who are somewhat lower down in the College list. From his great experience and intimate knowledge of the routine of the work of the Council, its committees, and other matters connected with the College, he is peculiarly fitted to occupy the presidential chair. Another important qualification is that during the seven years of the present President's period of office Sir HENRY has, we believe, been in accord with his chief in every good work in which the College, through its head, has been concerned. At this important epoch in its affairs, it is necessary that the fate of the College should be entrusted to the hands of one who is bound up with its history, and who has invariably shown himself capable of appreciating the position that the College should take in medical education. His liberal mind will be open to receive the most enlightened views as to the attitude that the College should assume in respect of the movement to which we have above alluded; and he will not, if the "Senate of Physicians and Surgeons" fail to come into existence, hesitate to recognise that the College will be able to exert a powerful influence for good as an integral part of the much-needed University. We believe that in advocating the election of Sir H. PITMAN we are reflecting the opinions of the Fellows generally, and doing not only the College but the profession a service. We cannot doubt that, supposing it is known that Sir HENRY will accept the Presidency, his election would be unanimous.

THE memorandum issued by the Secretary of State for War, as a preliminary to the introduction of the Army Estimates, is of a character to excite the gravest apprehension in the minds of all who take an interest in the welfare and reputation of the Army Medical Service, and this is intensified by the recent changes in the organisation of the War Office. When last year a most unnecessary, and in our opinion unjustifiable, outcry was raised on the subject of a mere verbal alteration in the definition of the rank of medical officers, and when, as an outcome of this, a very foolish demand for military titles was put forward by a section of the department, we gave our unhesitating support to the authorities. In this course we were actuated by a belief in their assurance that no injury was intended, or would be allowed to happen, to the medical officers by the first of these changes, and a firm conviction that if the second were granted it would tend to lower their status as a scientific body, and create heartburnings and jealousies which would operate greatly to their prejudice. But the transfer of the Medical Service from the War Office to the Horse Guards, as laid down in the War Office memorandum of February 8th, and the changes in the conditions of service and pension foreshadowed in the War Minister's memorandum on the Army Estimates, are matters of a very different character, and most seriously affect the interests and the prospects of the medical officers. To the prejudicial

influence of these changes we desire now to call the attention of the profession.

And first as regards the transfer of the branch from the War Office to the Horse Guards. Under the late organisation the Director-General was on all questions in direct communication with and responsible to the Secretary of State for War, subject, however, to the concurrence of the Commander-in-Chief in all matters relating to the *personnel*, and of the Surveyor-General of the Ordnance in those affecting the *matériel*. But under the new organisation he is reduced to a position corresponding to that of a Deputy Adjutant-General and Deputy Quartermaster-General. All his reports, requisitions, and recommendations must go to the Commander-in-Chief through the Adjutant-General or Quartermaster-General, according to the nature of the matter submitted. The Director-General cannot now approach the Secretary of State except through these military authorities; nor is any provision made for an appeal from their decision in any case whatever, and it is expressly laid down that the Quartermaster-General "will deal with sanitary questions relating to the army." Bearing in mind as we do the manner in which the authorities at the Horse Guards superseded or contravened many of the provisions of the Army Medical Warrant of 1859, based on the recommendations of Lord HERBERT'S Commission, we cannot but look with regret and unpleasant forebodings upon this change of system. We are disposed to think that the intensely military doctors who were so loud in their demands for military titles and position will have little cause to congratulate themselves upon this result of their outcry. By their distrust and unfounded accusations they have clearly alienated their best friends, who have availed themselves of this opportunity to get rid of their clamour. But while we regret this unfortunate arrangement, we have a stronger feeling as regards the changes affecting the executive officers foreshadowed in Mr. STANHOPE'S memorandum. "It is obvious that a system which offers inducements to officers to retire upon a pension after only twenty years' service is expensive to the State, and not even acceptable to that large section of the profession who, while feeling themselves unfitted for further service abroad, are ready and anxious to continue their duties at home stations. It is proposed to utilise in this manner the services of a large number of retired officers; and, further, not to allow any medical officer to retire on the pension attached to his rank until he has served in it a reasonable period." This holds out a delightful prospect for the department. Under the present system there is a considerable amount of dissatisfaction as to the very short period of home service permitted to medical officers; but if this new scheme be adopted, there will be such an increase of foreign and decrease of home service as will fully justify the loud complaints which will undoubtedly be made on the subject. Nor will this be the only result of the change; as a consequence of the prolonged continuous service in tropical climates—very often at unhealthy stations—there must inevitably be a greater amount of sickness and an increase in the death-rate of the medical officers, already considerably higher than that of the combatant branch, and this will certainly tend to make the service undesirable. But if Mr. STANHOPE perseveres with his scheme, it seems probable that he may find some difficulty in carrying it out from the unwillingness of retired medical officers to accept the appointments at home stations. They can hardly be offered the same conditions of pay and pension as are given to the officers who are sent abroad to all climates, nor can they be expected, certainly not compelled, to accept them under conditions different from, and less favourable than, those secured to them by the Warrants under which they entered the service. Again, can the Government with any show of justice make such a regulation as that proposed, "not to allow any medical officer to retire on the pension attached to his rank until he has served in it for a reasonable period"? The officer is clearly entitled to retire on the terms laid down in the Warrant under which he accepted service, and we are not aware of the existence of any such condition as that now proposed. Besides, what is "a reasonable period," and who is to decide the question? One of the complaints made to the Committee appointed in 1878 "to inquire into the causes which tend to prevent sufficient eligible candidates from coming forward for the Army Medical Department" was the capricious changes of Warrants and regulations to which medical officers were subjected; that they had no guarantee for the permanence of any provision made by a Royal Warrant, the privileges granted in one year being modified or withdrawn in the next, and yet upon this system, which we had hoped was permanently abolished, Mr. STANHOPE appears disposed again to act.

We venture to predict that if these new conditions of service are introduced the supply of candidates will be cut off, and the few who will think it worth their while to come forward will be of the very worst class. The services rendered by the medical officers in the recent campaigns in Africa, India, and Egypt have been such as to prove them men of high professional qualifications, able and willing to do their duty efficiently and bravely under any circumstances. The proposed changes will, we have no doubt, cause such a deterioration in the class of men who can be induced to join as will bring the department to the deplorable standard which was measured and condemned by Lord HERBERT'S Commission, and the supply of candidates to the low-water level of 1878. Such a condition will also tell unfavourably upon the army generally, for in these days of general education men will hesitate to enlist if they find that on the battle-field and in the hour of sickness they are to be attended by a class of doctors drawn from the lower strata of the profession. Mr. STANHOPE appears to have made himself safe for a short time by a reduction of the establishment, which will obviate the necessity for any admissions to the service this year; but though delayed, the disaster will surely come. Meantime we trust that the members of the House of Commons who take an interest in the profession and in the army will resist to the utmost the adoption of a course which cannot fail to be most injurious to both. We would only further remark that the proposed changes have been based upon a remarkable error—the supposition that the increase in the numbers of medical officers upon the non-effective list has been due chiefly to the operation of the Warrant of 1876, which granted the right of retirement to surgeons-major of twenty years' service. The real cause of the increase is the large number of medical officers, amounting to nearly 500,

commissioned in 1854-5 in consequence of the Crimean war, and upwards of 300 in 1857-8 on account of the Indian mutiny, the former thirty-three and the latter thirty years ago. The natural consequence of such unavoidable augmentations to the service in the hour of difficulty and danger must be an increase in the number of non-effectives after so many years. To the lapse of time, and not to the operation of the Warrant, we believe the increase may be justly attributed. We trust that before adopting such a destructive course as that proposed, Mr. STANHOPE will take counsel with men who are acquainted with the state and feelings of the profession, and will refrain from measures which must inevitably create strong feelings of discontent in the service, and in a short time destroy the efficiency of a most important department of the army.

THE importance of micro-organisms is daily assuming greater proportions. The part they play in the pathological processes of inflammation, and its consequences, suppuration and necrosis, have been already clearly pointed out. A fresh contribution has just appeared from the pen of M. VIGNOL, recording the results of experiments that have been for some time past carried on in the Laboratoire d'Histologie du Collége de France on the micro-organisms that are to be found in the alimentary canal.

In the first place M. VIGNOL made a careful investigation of the various forms of micro-organisms that are to be found in the mouth in health. Before commencing it, however, he naturally asked himself the question, What is the normal or healthy state? and the reply was fraught with so many difficulties and was so immediately dependent upon the period of life, the food, and other conditions, that he found himself at last reduced to the examination of his own mouth and its secretions, after he had spent three months in the country. For the isolation and recognition of the different forms of microbes he obtained from the mouth, M. VIGNOL adopted the usual methods of procedure with sterilised gelatine, gelose, and agar-agar, in both sterilised air and in hydrogen gas. The results of his experiments give the astonishing number of eighteen distinct microbes, apart from ferments and the spores of moulds, which are only accidentally or occasionally present. Amongst these eighteen microbes six proved to be already well known—namely, the staphylococcus pyogenes aureus and albus, the leptothrix buccalis, the bacterium termo, the bacillus subtilis, and the vibrio rugula. Of the others, though some might have been seen by RASMUSSEN, MILLER, and others, their descriptions were not sufficiently exact to enable them to be identified. Of the remaining twelve, only one, named the spirochete denticula, could not be artificially cultivated, and M. VIGNOL has commenced a fresh series of experiments with the hope of better success in this direction. The rest he distinguishes by italic letters, as bacillus *a*, bacillus *b*, and so on, giving their mode of growth and dimensions. M. VIGNOL has further endeavoured to follow the action of the microbes on the food by inoculating milk and other fluids with pure cultures. By proceeding in this way he has found that the staphylococcus aureus and albus and the leptothrix buccalis (the very poisonous action of the former of which through the skin is now well known and was described by Prof. WATSON CHEYNE in the lectures he has just given at the Royal College of Surgeons), whilst incapable of attacking or effecting the solution of albumen, fibrin, or gluten, and ineffective in converting potato-starch into sugar, yet when milk was inoculated with them coagulation took place, apparently from the development of various acids, amongst which lactic acid was the most conspicuous. On the contrary, the bacillus subtilis, the bacterium termo, and the vibrio rugula, with the several bacilli M. VIGNOL has discovered, all, or almost all, render albumen transparent and dissolve albumen and fibrin, though they appear to have little action on gluten and starch. The microbes found in the mouth seem to be capable of resisting the action of the gastric, biliary, and pancreatic juices, for several hours at least.

The general conclusions at which M. VIGNOL arrives are that many microbes enter the economy with the food and are carried on by the saliva into the stomach. Here their activity may perhaps be temporarily lowered or arrested, whilst some may perhaps be destroyed, but the majority enter the small intestine and contribute by their action to render ingested substances soluble—that is to say, assimilable by the lacteals; their number, which rises to more than twenty millions per decigramme in the fæces, shows the intestinal media are favourable to their growth, and renders it probable that the part they play in the process of digestion and the transformation of food is not inconsiderable—conclusions that are quite in accordance with the views of PASTEUR.

IT is a happy circumstance that Sir JAMES PAGET differs remarkably, in one respect at least, from his great hero, JOHN HUNTER. HUNTER, as one of his biographers tells us, felt an insuperable objection to, and an embarrassment in, speaking in public. We may not speculate as to the amount of objection which Sir JAMES feels and has to overcome to speaking in public. But it is certain that he displays neither embarrassment nor objection, and that his public utterances are a great public benefit. The last of these, which has been pretty fully reported by the daily papers, is one of the best, in the shape of the annual address to the students of the London Society for the Extension of University Teaching. Last year the annual address was of another class altogether, the work of Mr. JOHN MORLEY, praising literature as a study. To this address Sir JAMES PAGET bore a high tribute, but left his hearers in no doubt that, as a means of happiness and source of usefulness, the study of science was more excellent still. It is hard to have to decide between the merits of two such courses, and we can only wish that the natures were more common in whom the two faculties meet, as they do so happily in Sir JAMES PAGET—the faculty of expression and the faculty of observation. Nothing could well be more forcible than Sir JAMES'S exposition of the advantages of the study of science, and his vindication of even "a little knowledge," so that it be real and true as far as it goes, and has been made the property of the mind by a process of self-verification. Sir JAMES PAGET claimed for the study of science that it included the teaching of the power of observation, the teaching of accuracy, and, lastly, the teaching of the methods by which we can pass from that which was

proved to the thinking of that which is probable. The rarity of the faculty of sound and deep observation, and the difficulty of accuracy, were well stated. It is indeed one of the defects of our common systems of education that so little attention is given to the cultivation of a faculty of estimating evidence, such as is the chief and great advantage of the study and practice of law. Another quality in which scientific men are apt to be deficient, according to Sir JAMES, is that of enterprise. The love of truth is a fine thing for the sake of truth itself, but the enterprise that seizes truth for the sake of its uses, that takes hold of it at its practical point and applies it to great human and public purposes, is a great faculty, and was fitly praised at the Mansion House—that centre of the enterprise of the world. Sir JAMES evidently thinks that if the contagion of science could take effect on a few more of our City men as it has on Sir JOHN LUBBOCK, great results would follow. Scientific men want the enterprise of business men, and, according to Sir JAMES, business men would lose nothing of their efficiency for an admixture of the scientific element. A little more push or enterprise on the part of Sir HUMPHRY DAVY and Mr. FARADAY might have anticipated by a generation the discovery of anæsthetics, or on the part of Dr. CUMMINGS, a Professor of Cambridge, the discovery of the telegraph. It seems a trite occupation to go on observing and observing. But, trite as it is, it must be persevered in, and men of authority must speak it out plainly, though few can hope to catch that *felicitas verborum* which is such a gift in Sir JAMES PAGET, and of which the following sentence is an illustration: "We all of us know a considerable number of persons who would not for their lives tell a lie, but who, nevertheless, always seemed as if for their lives they could not tell the exact truth." Loose observation of what is before us, and loose statement of what we think we observe, are the clogs of science. Better be like JOHN HUNTER, slow in articulation and embarrassed in public speech, than be superficial in observation and fluent in tongue. Our profession, perhaps, misuses the gift of speech and rhetoric less than all others. In some departments words seem to have taken the place of deeds. But in our calling, too, there is room for more care in observing and narrating facts. Let nobody begin this greater discipline lightly. It cost JOHN HUNTER much. He slept less and worked more than any other man of his time. And this is the price of getting at facts. At least, this is what he had to pay who, according to Sir JAMES, was "the master of all the science in his own profession—the greatest observer, the greatest thinker, on the whole, we have ever had." The extension of university teaching will be a blessing if it can spread the desire to imitate such men as HUNTER and DARWIN. It will, indeed, add to the happiness and usefulness of life.

ALL honour to Lord RANDOLPH CHURCHILL! He has achieved by a simple brilliant speech what others scarcely dared to hope for—the promise of a real inquiry into the doings of the Metropolitan Board of Works. May he use with good effect the lantern of DIOGENES. If the objects of his scrutiny are all honest men, as many of them most certainly are, so much the better. We shall all be glad to be relieved from distrust of a great public body which in its time has done much good. But if it be proved that the taint of corruption has crept in, let the exposure be open and the remedy swift and drastic.

As a result of a conference recently held in one of the committee rooms of the House of Commons, Mr. OSBORNE MORGAN on Tuesday last asked the Home Secretary for information in regard to the forthcoming Royal Commission. The object of the question was to induce Government to include in the inquiry the causes of the foul pollution of the Thames which has disgraced London for so many years, a pollution due entirely to the acts of the Board. The reply, we regret to say, was purely official, and by no means satisfactory. Mr. MATTHEWS is reported to have said that methods of dealing with the sewage of London would be outside the scope of the inquiry. But the question really at issue is not so much the methods themselves as the conduct of the Board in regard to them, the attitude which has been maintained, and the expense which has been incurred. We maintain, and have maintained for years, that the action of the great metropolitan authority in regard to the sewage of London is one of the greatest scandals of the age. When Lord BRAMWELL'S Commission was appointed in 1882 to inquire into the subject, the Board strained every nerve in the endeavour to prove that no nuisance existed, and an immense sum of money, that came from the pockets of the ratepayers, was spent in this ridiculous attempt. The Commissioners not only reported against the existing system, but did so in the strongest terms, and dwelt upon the urgent danger to the metropolis which it involved. They gave advice as to the removal of the present outfalls, which should have been taken as equivalent to a command. Yet the Board quietly ignored it, and proceeded in a leisurely manner to arrange for expensive works of precipitation at Barking and Crossness, which will almost certainly be useless in a year or two. Meantime, immense sums have been spent in an attempted disinfection of the sewage. These sums were simply thrown away, for the river had never been in such a horrible condition as it was last year. These and such-like questions are, we submit, entirely pertinent to the proposed inquiry, which would, indeed, be most incomplete without them. They would add but little to the labours of the Commissioners, and would, we believe, throw valuable light on the work of the Board. Lord RANDOLPH CHURCHILL, whose political position gives him remarkable influence, and who has thrown himself with zeal into the work of departmental reform, is not likely to be blind to their importance, and to him at the present juncture the eyes of all sanitarians as well as of all economic reformers will be turned with interest and hope.

THE death occurred at Brighton on the 3rd inst. of Dr. Rickard Patrick Burke Taaffe, who had for the past thirteen years filled the post of medical officer of health for the borough. Dr. Taaffe, who at the time of his death was in his sixtieth year, became a Fellow of the Royal College of Surgeons of England in 1857, and obtained the M.D. degree at the University of London in 1865. He was largely instrumental in founding the Royal Alexandra Hospital for Sick Children, opened some years ago in extended premises by the Prince and Princess of Wales, and was officially connected with many of the local medical institutions.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON AND DEGREES FOR MEDICAL STUDENTS.

THE recent decision of the Senate of the University of London, given by the casting vote of the Vice-Chancellor, "not to offer any direct opposition to the petition of the Royal Colleges of Physicians and Surgeons seeking ability to confer degrees in medicine and surgery," has naturally caused much surprise among the graduates of the University, as well as to teachers generally. To object *in toto* to the formation of a real Teaching University in London, which would at any rate secure an adequate knowledge of arts and science in candidates for its degrees, and passively support a movement which is admittedly for a purely professional object, without any relation to academic education, is a policy which can hardly fail of being characterised as eminently selfish. The University, by this false move, has been placed in an isolated position as the supporter of the Royal Colleges, and in virtual antagonism to every other University in the kingdom which are unanimous in their opposition to a degree-granting power being bestowed upon the Corporations. It was quickly apparent on Tuesday last, at the meeting of Convocation, a report of which is published on another page, that the action of the Senate was disapproved by almost every graduate present. The vote of the graduates, which was practically one of censure on the Senate, has now made it impossible for the University as a body to take any useful action either in favour of or in opposition to the petition of the Royal Colleges. Another feature in the line of opposition taken by the existing University to the movement promoted by University and King's Colleges must be again pointed out. The chief argument used by it against a Teaching University is that a scheme of reform is being considered by the Senate and a sub-committee of Convocation, which will provide all that is necessary for the higher education in London. This reform has now been promised for more than a year, and it is surely time that it should be published, and a decision of Convocation taken thereon. The authorities of the University cannot intend to postpone the settlement of this question until after the proceedings for the Charters have been before the Privy Council, but will, we hope, shortly make them public, so that the position may be further cleared up. Meanwhile we hear that a conference between a committee of the Senate and some of the London teachers of medicine is appointed for the 14th inst., to discuss the hindrances which are supposed to deter students from pursuing their professional career in London. Meetings of this kind, a due representation of teachers on the Senate, and the formation of Boards of Studies, might six or eight years ago have arrested the movement for a new university; now they are not only useless for this purpose, but betray a consciousness of weakness as to their present position on the part of the Senate.

THE RIGHTS OF THE APOTHECARIES' HALL IN DUBLIN.

THE King and Queen's College of Physicians in Ireland, before the Vice-Chancellor, have sought to procure a declaration that the Apothecaries' Hall of Dublin is not entitled to hold a qualifying examination under the Medical Act of 1886, or to grant a diploma in respect of Medicine within the meaning of that Act, and that the College of Surgeons of Ireland and the Apothecaries' Hall are not entitled to enter into a combination for the purpose of holding such examination. Our readers will remember the great display of historical learning and argumentative skill with which such contentions were urged in the Medical Council against its sanctioning the right of the Apothecaries of Ireland either to be considered an examining body in Medicine, or to enter into a combination with another examining body, under the Act of 1886. They will also remember the signal failure of the College. Nothing daunted, they went to law against the Apothecaries and against the College of Surgeons for agreeing to combine for a qualifying examination. The Vice-Chancellor has given a very decided judgment in favour of the Apothecaries' Hall and their right to combine. He expressed his dissent from all parts of the proposition against the Hall—such as that their profession was an inferior grade, that their instruction was inferior and inadequate, and that therefore it was an error on the part of the Legislature to have included the Apothecaries in the list of "qualifying bodies." He said: "He was satisfied that the apothecary was something very much beyond a mere druggist and chemist or compounder of medicines, and should be prepared to hold, if necessary, on statutory recognitions and legal decisions both in England and Ireland, and on the evidence before him as to practice, that the apothecary was a person capable of lawfully practising as a medical practitioner in respect of medicine at least." After referring to the curriculum required of persons seeking the licence of the Hall, and to the steps taken to provide competent examiners, he vindicated, or expressed his readiness to vindicate, the Legislature from having opened the door to unqualified uneducated persons. But, deciding the case as a question of law, he held that under the two Acts (1858-1886) the Hall was entitled to grant a diploma entitling the holder to registration as a medical practitioner, and to combine with the College of Surgeons to hold qualifying examinations in Medicine, Surgery, and Midwifery. He therefore did not sustain the case of the College, and dismissed the information with costs. The College will now perhaps reconsider its decision in excluding the Hall from its conjoint scheme. It is, at any rate, shown to have been grievously wrong in its legal arguments and contentions. The judgment is of great importance, as showing the legal position of apothecaries, and justifying the view taken by the Medical Council, which would have put itself into a very awkward position had it refused to recognise the legal status of the apothecaries in England and Ireland.

ALBUMINURIA IN THE APPARENTLY HEALTHY.

THIS subject was recently discussed in a short paper, at the Islington Medical Society, by Mr. H. F. Stokes. He related a case in which a patient of his had been found, four years since, to have albuminuria by a consultant, who immediately took a very gloomy view of his case, and informed his wife that he would not live more than three months—a prognosis refuted by the gentleman continuing in good health to the present time in spite of the persistence of albuminuria. There are no casts in the urine, and no other renal symptom. The urine is lithiacal, but this fault is largely influenced by the habits of the patient, especially in the matter of beer, which he used to take freely. When the beer is discontinued the lithiasis abates, and with it the albuminuria. In a happy interval of this sort the patient's urine was found free of albumen, and he was accepted for life insurance. Mr. Stokes mentioned two or three cases in which albuminuria existed for a long time in his experience without apparent harm, notably one of a gentleman still living, about sixty, in whose urine twenty years ago he detected a considerable quantity of albumen, which still continues. This patient has been a great athlete, and has climbed every considerable mountain that can be climbed in Europe. He is now infirm with prostatic and cystitic troubles. Mr. Keele related a case of acute

nephritis, with hæmorrhage, partial suppression of urine, convulsions, anasarca, &c., which did not prove fatal as expected. All the symptoms disappeared, but the albuminuria persists. Dr. Glover gave some particulars of two cases of temporary albuminuria, one in a lady about sixty-five, with severe vomiting, distressing headache, full pulse, and hot skin. There was, for one day, about a fourth of albumen. It was found that the diet had been too free, especially with regard to eggs, five of which had been taken in one day. A little starvation and purgation sufficed to remove the albuminuria and all the symptoms. In another case, that of a little girl about six, with "cold-water" feeling down the back, followed by fever, sickness, and coughing, there was slight hæmaturia, with corresponding albuminuria. The albuminuria lasted only one day, and the other symptoms gradually abated with rest in bed and other treatment. The disposition of the meeting was to believe, with Professor Grainger Stewart, that the gravity of mere albuminuria had been overrated.

VACCINATION AND ITS OPPONENTS.

SOUTHPORT has been interesting itself in anti-vaccination arguments, and the *Southport Visiter* has published in its columns letters for and against vaccination. One of its correspondents, writing against vaccination, speaks of Dr. Alfred Russel Wallace as having applied "the tests of genuine scientific scrutiny to Jenner's device, and found it to be, and proved it to be, from the highest official and authentic records, nothing more, nothing less, than a sheer delusion," &c. We refer to this because we are aware that the fact that Dr. Wallace has lent the weight of his name to the anti-vaccination cause has, and will continue to have, influence in inducing many persons to remain susceptible to small-pox. Dr. J. C. McVail, by his admirable book, "Vaccination Vindicated," enables us to understand the value of Dr. Alfred Russel Wallace's genuine scientific scrutiny. In a leading article in our last week's issue we referred to a diagram constructed by Dr. Wallace to show small-pox mortality in different periods of time, and which Dr. McVail publishes in answer to his question, Can diagrams be manipulated? We may now direct attention to Dr. Wallace's argument that the small-pox prevalence in 1877 was due to excess of vaccination in 1876, and in connexion with which he gives 566,587 as the number of vaccinations in 1876. Dr. McVail states that Dr. Wallace did not get these figures from the original report, as he states he did, but from White's book on "Playfair and Dilke," and Dr. McVail proves this by showing that the figures in the report are really 506,587, but they are misprinted in Mr. White's book 566,587, which has thus led Dr. Wallace into the erroneous belief that there was excess of vaccination in that year. Again, in another place, Dr. Wallace specifically mentions "a table" in the eleventh annual report of the Local Government Board as the source of his information. He says: "From this table I have calculated the numbers," but, as Dr. McVail shows, there is no such table in the report; Dr. Wallace got his figures from page 39 of Mr. White's book. Now, as to the correctness of Mr. White's figures. Dr. McVail will forgive us if we continue to use his words as well as his arguments: "In replying to Sir Lyon Playfair, he (White) gives a record of vaccination which he says was copied from the eleventh annual report of the Local Government Board. Then he takes two separate tables (Nos. 76 and 77, the former for 1852-72, including revaccinations, and the latter for 1873-81, excluding revaccinations). He leaves out the note and the separate headings of the two tables, adds some statistics regarding population and small-pox mortality, and so constructs a statement which simply falsifies one essential part of the case." Thus Dr. Wallace has been again misled by his friend Mr. White. It is painful to see a man of scientific eminence like Dr. Wallace placed in so unenviable a position. We await now the course he will pursue. The friend of Darwin and distinguished in his own branch of science, we are convinced he cannot leave unanswered Dr. McVail's indictment. What would Darwin have thought of such "genuine scientific scrutiny"?

LONDON HOUSES.

THE condition of certain recently built houses in St. Pancras has been subject of discussion by the Sanitary Committee of that parish. Houses, it appears, had been erected on a plot of land which had been for some years a source of nuisance because of the deposition of refuse on its surface. The district surveyor had been communicated with, and had caused the removal of the surface material within the four walls, and had had concrete put in. But in reference to another group of houses it was said that the builder had been discovered plastering the interior of the walls with plaster made from dustbin refuse, and to prevent this it was stated the Metropolitan Board of Works possessed no powers. Dr. Sykes, the medical officer of health, reported that no less than eleven cases of typhoid fever had been found in the neighbourhood in the last few weeks, and the chairman stated that when he entered one of the newly built houses, which appeared about to be occupied, although unfinished internally, "there was an overpowering smell of sewer gas." If this be the case, it may well be asked, Where is the supervision of the construction of house drainage by the vestry? Their powers are ample, but why are they not exercised?

THE PORT OF LIVERPOOL.

THE annual record of medical work in the port of Liverpool is always of interest, as showing the nature of the precautions taken at this great port of communication with the outer world, and Dr. Stopford Taylor's last report forms no exception to the rule. During 1887 the total vessels entering the port were 22,384 in number, and of these 4182 were regularly inspected. The English foreign-going ships are stated to be in a satisfactory sanitary condition, and the list of defects made good in shipping generally is steadily tending to a higher standard of healthiness than any heretofore experienced. In one instance five fatal cases of yellow fever had occurred on board an in-coming ship, but after due disinfection, and the destruction of bedding and clothing, there was no cause for detaining the vessel. The *Governor*, a cholera-infected ship, also arrived from Calcutta on Nov. 11th, but the fatal attacks had occurred during the early part of her voyage; the vessel had since been allowed to pass through the Suez Canal in so-called "strict quarantine," and the needed precautions having been taken on board, the ship was docked the next morning. But supervision extends beyond in-coming vessels; the healthiness of out-going ones is also held in view. Thus, in the case of emigrants travelling from Hull to Liverpool on their journey from Hamburgh to the United States, the medical officers of health of Hull and Liverpool are in constant communication, and a suspicion of infection detected at Hull is promptly reported so that it may be dealt with before the emigrants go on board at Liverpool; these precautions being especially held in view as to such diseases as small-pox, to meet which efficient vaccination is insisted on. The details of these and similar proceedings are set out in the report, and they show that a large amount of work, which must be of real value to this country and to others with which we are in communication, is regularly and systematically carried out in the port of Liverpool.

FISH CARRIAGE.

A BILL for imposing a uniform tariff of freights for the carriage of fish upon the British railway companies has been brought into the House of Commons under the auspices of Sir Edward Birkbeck and the National Sea Fisheries Protection Association. It would be hard to name an object more worthy the attention and effort of all who have the national prosperity at heart than this of facilitating the cheap distribution of fish. Invaluable as a food, the use of fish is practically only limited by the means of conveyance, for up to the present time the possible supply is vastly greater than any actual demand, and the fisheries industry is therefore capable of almost indefinite extension. Our sympathies, then, are entirely with Sir Edward Birkbeck and his collaborateurs; but we are a little afraid that their present scheme is somewhat too inelastic. In a word, what they propose to do amounts to this. They would impose upon all railway companies, without distinction, a uniform tariff of 1½*d.* per ton per fifty miles, with an additional 1½*d.* for the first fifty and another additional 1½*d.* for the last fifty, and in the case of a journey of less than fifty miles a special freight of 4*d.* per ton. This for land carriage. When sea carriage is included, a further additional charge of 6*d.* per ton is to be permitted. This scheme takes account, as will easily be seen, of all the common elements in the problem. There is a haulage rate of 1½*d.* per fifty-mile-ton; terminal charges are represented by the additional 1½*d.* allowed at the beginning and at the end of the journey, and transshipment charges are provided by the extra sixpence for sea carriage. It may also be assumed that the rate of charge prescribed is a fair average rate. And, if so, it is abundantly clear that legislation of the sort is needed. A dozen ports could be named from which, if this scheme were applied, fish could be brought to London at half the present rates, and in some instances the reduction would be to one-third of the present cost, and even to less than that. It is pitiful to think that men and women are starving in the east of London while good food is wasting in the sea that washes our shores, and fishing industries are languishing upon our coast, all for want of a better organised transport. If the present scheme can be applied, then Sir Edward Birkbeck's Bill ought to pass without delay. If it can by any reasonable measure of amendment be made workable, then it should be the duty of members of Parliament, especially of such as sit for metropolitan constituencies, to see that it does not miscarry; and, in any event, the people of this island kingdom, and especially of this vast city, have the best and strongest claim to be supplied with every possible facility for receiving the invaluable tribute of the sea.

IODISM.

THE subject of iodism has been studied in a thesis[1] by Dr. Elizabeth Bradley of New York, undertaken at the instance of Professor Fournier. The writer has collected and analysed a large number of published cases, proving that the effects known under this head are due to the absorption of free iodine, these effects being widely produced in the organism. A susceptibility to the action of iodine is fully recognised, and it is pointed out that in cases of renal or cardiac disease, or of morbid irritability of the nervous system, the physiological action of iodine may be increased, and symptoms of intoxication induced. These symptoms point to derangement of every organic function. They may ensue on a long course of medication or appear at the commencement of the treatment, and may develop gradually or suddenly. The most constant of these phenomena is an increased rate of the pulse, which at the same time becomes weak and compressible; but the temperature is not raised, rather depressed. The disturbance of circulation is evidenced by the occurrence of œdema, which in slight cases may be limited to the eyelids, but in severe cases may involve other parts—as the glottis, lungs, and brain. The blood itself is altered, and there may be produced albuminuria or hæmaturia, with more or less suppression of urine. The nerve symptoms are mostly those which are referable either to cerebral anæmia or cerebral congestion. They sometimes take on the form of uræmia, at other times of melancholia and general paralysis. The pulmonary symptoms may be those due to the derangement of circulation, such as bronchitis, or œdema with hæmoptysis, or there may be dyspnœa independent of mechanical difficulties. On the side of the alimentary system, anæroxia or boulimia, nausea, vomiting, pain (gastric and intestinal), diarrhœa and constipation, are conditions which have all been met with in various cases. The skin may be affected—as evidenced in the various iodide rashes, which may take on the type of erythema, urticaria, bullous or papular eruptions, or purpura. Lastly, the joints may be attacked and become swollen and painful.

[1] L'Iodisme. Paris: Steinheil. 1887.

OVER-PRESSURE IN A BOARD SCHOOL.

THE golden mean of school work still remains an unrealised though not unpractical possibility, and it is not even clear that we shall soon see the end of complaints, discussions, and reforms relating to this subject. The precise coefficient of study which agrees with fair bodily health is indeed an uncertain quantity regulated by diverse personal peculiarities. Its fixation must be ordered in each case by a special rule. In arranging a system of education, however, it is both possible and needful to allot to the average intelligence an average amount of mental effort which will duly provide for the requirements of education and of health. It is further very desirable and not very difficult, in allotting tasks, to keep in view the leading constitutional characters, as well as any marked personal aptitudes or disabilities such as are illustrated by the learners in every school. We are aware that these facts are to a greater extent than is commonly known recognised by judicious teachers throughout the country. It is equally true, however, that, whether from a fault in the system or in those who administer it, evidences of over-work are far from uncommon. Recent reports from Yeovil assign to a Board school in that town an unenviable notoriety in this respect. The deaths of two pupil teachers and the illness of another, as well as of several children, have been attributed to over-pressure. There appears to be a mixture of truth and error in these reports; for in one fatal case death was associated with heart disease; in another its connexion with mental over-work is said to have been more plainly indicated by the appearance of the brain after death. In all such cases it is somewhat difficult to separate the effects of causes from mere coincidences. But the prevalence of ill health in this particular school seems to have been sufficient to justify a suspicion that study has been seriously overdone. It is our duty not merely to draw attention to such instances of mismanagement, but to indicate as far as possible the most suitable alterative measures. One or two of these have been touched upon already. An improvement which readily suggests itself is the substitution of some better method of remuneration for teachers than that which affixes a money value to every pupil passed on examination. It should also be kept in mind that Board-school children are not invariably well fed, and that it may consequently be necessary in certain cases to evoke somewhat cautiously the efforts of a brain incompetent through hunger. Neglect of simple rules like these will probably account for some obscure and

fatal ailments involving the brain in childhood, whose cause is commonly overshadowed by a general condemnation of the constitutional type.

CONTAGIOUSNESS OF LEPROSY.

THE result of the recent agitation in Philadelphia with regard to the presence of some lepers in the city has been the passing of the following resolutions by the Pennsylvania State Board of Health:—"That this Board endorses the recent action of the Board of Health of the City of Philadelphia in promptly isolating two individuals afflicted with leprosy. That it is irrational to suppose that transportation to America will deprive this disease of its infectious character; and therefore that it be placed upon the list of communicable diseases dangerous to the public health in the 'Model Ordinance for the better preservation of the Public Health in cities and boroughs of Pennsylvania'; and, further, that all boards of health, sanitary committees, and borough councils throughout this State be enjoined to class it among the diseases required by law to be reported to the sanitary authorities." Recent communications to the daily press in this country warn us that in the future an outcry may be raised for the adoption of similar severe measures towards the numerous unfortunate lepers who come to this country. Allowing that leprosy is contagious, like syphilis, it is certainly only so under very limited conditions in this country. The number of lepers coming under observation in England during the last twenty years has been probably considerably over one hundred, and no instance of contagion from them is on record.

ALLEGATIONS AGAINST HOSPITALS.

WE regret to notice a tendency amongst certain sections of the press of the present day to bring serious and unfair charges against hospitals or hospital officials. Not only are these charges brought forward, but there is full prominence given to them in order that there shall be no doubt as to their being brought to the notice of a large section of the public. Doubtless this is done in good faith, under the impression that the interest of the public is being served by such publication. But is this so? We do not think it is. To make allegations against hospitals without sufficient reason for so doing, in some instances after a coroner's jury has exonerated them from blame, is directly the cause, in most instances, of diminished subscriptions to the hospital named, and a proportionate loss of its power to do good. This does not apply to the Royal hospitals, for their income is, to a large extent, independent of public favour; but even here harm is done. The medical man under whose care the particular patient may have been placed is caused great annoyance and damage to reputation by the bringing forward of charges unnecessarily, to which he is prevented from replying by those in authority at his hospital, or by his own consciousness that any discussion of the affair in the public press would be productive of further injury to the hospital which he represents.

LEEDS VACCINATION RETURNS.

THE Leeds guardians have, as we anticipated last week, decided that the proper method by which to remunerate vaccination officers is by fee for each certificate registered, and not by salary. Their experience as to forged certificates is so exceptional that it should not form a ground for altering a system which has been proved to work efficiently; and, as the Local Government Board has pointed out to them, any attempt at dishonest manipulation of the returns ought to be deducted by a vaccination committee appointed to supervise the details of the work. In such a populous district as Leeds the need for such a committee is manifest.

TISSUE METABOLISM.

THE elimination of carbon, chiefly as carbonic acid, is subject to interesting variations under the influence of different kinds of circumstances. In one series of experiments made by MM. Richet and Hanriot, 268 grammes of carbon being employed, they found that 208 were discharged from the lungs, 6 by the kidneys as urea, and 30 with the fæces. There remained 25 grammes of carbon as the representative of the difference between the quantity ingested and the quantity eliminated. This figure corresponded exactly with the augmentation of the body weight—300 grammes a day,—for it is known that for every 300 grammes of solid tissue are found 25 of carbon and 250 of water. An analysis of the gases of respiration during fasting and during rest shows that the centesimal proportion of oxygen absorbed and carbonic acid rejected is almost exactly the same. It may be concluded that respiration is regulated automatically by the proportions of carbonic acid required for elimination or of oxygen for absorption. During digestion the carbonic acid eliminated augments a little more than the oxygen absorbed, and diffusion increases equally.

SIR HENRY ACLAND.

SIR HENRY ACLAND, the late genial President of the Medical Council, has for some time past been suffering from serious impairment of vision and pain in the left eye, symptoms which culminated on Wednesday last in an attack of hæmorrhagic glaucoma, rendering the removal of the eye necessary. He underwent the operation, which was performed by Mr. Henry Power, with great fortitude. We are sure our readers will sympathise with Sir Henry Acland in his affliction, and we trust that he will soon recover from the serious operation he has undergone. The following bulletin was issued:—

"Sir Henry Acland has had an attack of hæmorrhagic glaucoma of the left eye, causing such severe pain that its removal was found to be necessary. He is going on well.

"HENRY POWER. ED. B. GRAY, M.D.
ROBERT W. DOYNE. THEODORE ACLAND, M.D."

DESTRUCTION OF SEWER AIR.

AT a recent meeting of the Society of Medical Officers of Health, Dr. John T. Rowland, health officer for Richmond, gave an account of Keeling's apparatus, which has for its object the passing of air from sewers through gas furnaces. Our attention is now directed to the patent Cupola Sanitary Lamp, or "sewer-gas destructor." In its action it is somewhat similar to that of Keeling's apparatus; it may be used as an ordinary street lamp, the flame creating a partial vacuum, causing the air to rush from the sewer into the lamp. The internal appliances are of copper, which is maintained at a temperature of 400°; living organisms coming in contact with this are necessarily destroyed. It is stated that the illuminating power of the lamp with an ordinary gas jet is nearly double that of the common street lamp. Whatever use may be found for apparatus of this kind, it may be hoped that local authorities will not accept it in substitution for the reconstruction of faulty sewers.

THE LUNACY BILL.

THE Lunacy Bill, introduced into the House of Lords by the Lord Chancellor on the 2nd inst. and read a first time, is, as his lordship observed, practically the same measure as that which has been passed three times in the Upper House. Meanwhile, attention may be directed to the comments we made on the Bill in our impression of Feb. 12th last year.

THE GERMAN EMPEROR.

WE regret to confirm from information supplied to us by a special correspondent at Berlin the intelligence of the grave illness of the German Emperor, which the majority of our readers will have familiarised themselves with from the daily press. On the 3rd inst. His Majesty began to suffer from a general cold, combined with an affection of the mucous membrane of the throat and an irritation of the eyelids. In addition to these symptoms, he has since then been frequently troubled by acute abdominal pains, for which morphia injections have been used. Since the 6th inst. his appetite has considerably fallen off, a loss doubtless due to the morphia used to dull the illustrious and venerable patient's pain. No improvement of any moment has, according to our latest information, been observed, and the condition of the sufferer sometimes approaches to coma. He has passed a very restless night, and continues very weak. We cannot but regard his state as critical, and the German people in this, the hour of their twofold affliction, have the sympathy of the civilised world.

Since the above was written we learn with infinite regret, though without surprise, that the illness of His Imperial Majesty has terminated fatally.

THE POOR CHILDREN'S AID SOCIETY.

THE Society which bears the above title cannot lay claim to a venerable antiquity, having now been in existence for somewhat more than a year. It has during this period, however, done excellent service in the cause of charity. Between January and December, 1887, and with an income of £1300, it established in London forty-eight centres, at which 83,127 free meals were distributed, at a cost of from ½*d.* to 2*d.* each, and 100 clothing centres, at which 1025 children were suitably clad. Free letters of recommendation to hospitals and convalescent homes have also been issued in a number of cases, and good work has been done by sending delicate children to enjoy the benefits of country air for two or three weeks at a time. This latter undertaking, which has absorbed much of the philanthropical industry of the metropolis during the past few years, is not the least important part of the Society's work, and opens up a very avenue of health to many prisoners in city air. During the past two months of the present year the labour and cost of gratuitous feeding and clothing have greatly increased, and the necessity for hospital relief in sickness continues as great as ever. The promoters of this movement, therefore, trust that public benevolence will not be backward in assisting a work so practically useful. They have been at some pains to explain the details of their scheme, and have used, with apparently complete success, elaborate precautions to prevent any possible misdirection of their charitable purpose. We may add that the office of the Society is at 3, Agar-street, Strand.

SUCCI: THE FASTING MAN.

AN Italian correspondent writes:—On the night of the 1st inst., immediately after the clock struck 12, Signor Succi, in presence of the representatives of the Accademia Medico-Fisica of Florence, began his thirty days' fast. Besides Professors Luciani and Filippi, there was a considerable attendance of prominent Florentine physicians, with a large number of medical students, lay citizens, and newspaper reporters. By one minute after midnight the patient, or, as others prefer to call him, the experimentalist, had been inducted into his proper bedroom, weighed, his temperature noted, and every condition put *en règle*, as he lay down to rest. The apartment had been minutely and carefully examined so as to exclude even the suspicion of any alimentary substance having been secreted, after which the key was turned in the lock of the door, the door itself sealed, and two watchers left alone in the room with Signor Succi. These gentlemen had been chosen from the committee of those interested in science, who had volunteered their services *ad hoc*. At 8 A.M. next morning (the 2nd inst.) the two watchers gave their report, and were then relieved by two others. Between 8 and 9 o'clock of the same morning Professor Luciani and Dr. Baldi, on behalf of the Accademia Medico-Fisica, made a series of physical or physiological observations, the results of which appear in the following bulletin:—

	8 A.M.
Pulsations	70
Respirations	22
Temperature	36·5° C.
Weight after having emptied the bladder	66·610 chilogr.
Height	1·642 metre.
Pressures: right hand	40 chilogr. } Maximum.
,, left hand	26 ,, }

With sixty-five pressures at intervals of two seconds the muscular exhaustion of the left hand was reached.

Urine	Quantity	1690
	Density	1023

Signor Succi is in the best possible spirits, and is quite sanguine as to his extending his fast over the time imposed on him. The result is watched with special interest by Italian surgeons and physicians anxious to get some scientific evidence of the time during which the chylo-poietic viscera can remain undisturbed by the ingestion of food—a point of the highest importance in abdominal surgery or in bowel hæmorrhage from perforation. The substances stipulated between Signor Succi and the Accademia as available by him for use are—(1) a saline purgative, to be agreed on beforehand; (2) an alkaline beverage; (3) water for washing out the stomach and for drinking purposes; (4) olive oil, in an inconsiderable quantity, for embrocation.

CARDIOPATHY.

EVERYONE admits that the muscle of the heart is of more importance than the valves of the heart, even though disease of the former is generally at the mercy of disease of the latter. Doubtless we must recognise valvular cardiopathy, but it seems also clear that we can overestimate this form of heart disease and neglect the vascular or arterial cardiopathy. Not while M. Huchard lives, however, shall we be allowed to pass by the importance of the coronary arteries. He has written of late numerous papers, the latest being one on primary "coronaritis" with partial atrophy of the heart. It may be found in the *Bulletins de la Société Médicale des Hôpitaux de Paris*, No. 3.

THE NEW SALFORD INFECTIOUS HOSPITAL.

THE site proposed for the new Salford infectious hospital bids fair to become an important battle-ground. Allegations as to its unsuitability, both as regards prospects of the spread of certain contagia and by reason of its soil, elevation, and proximity to sewage works, have been somewhat numerously made, and to many of these contentions Dr. Tatham now makes answer in a carefully compiled report. He alleges that the district in which the site is situated is a healthy one, having had during a specified five years an average general mortality of less than 14 per 1000. As to proximity to dwellings, the experience of the present hospital is brought forward, the Wilton hospital being on one side close to a large number of dwellings. Fever alone appears to be here in question, and hence the results compiled by Mr. Murphy as to the London Fever Hospital are also referred to as disproving the alleged danger. As to the position of the sewage

works in relation to the site, the experience of four towns having precipitating tanks within 200 yards of dwelling-houses has been sought, and the reports received all distinctly state there has been no excessive incidence of diphtheria, enteric fever, or throat illness amongst those occupying such dwelling-houses; the medical officers of health of those towns further expressing an opinion against such works being a nuisance. How far this latter opinion may satisfy complainants remains to be seen; but it is certain that great difficulties must almost necessarily be experienced in procuring a site for such a hospital, and that objections, in some form or other, will be found to attach to any that may be selected. On the whole, Dr. Tatham regards the proposed site as being as free from objection as any other that could be suggested.

THE REDUCTION OF NITRATES BY MICRO-ORGANISMS.

MR. PERCY FRANKLAND, in a paper read to the Chemical Society on the 16th ult., gave an account of some observations he had made on the action of thirty-two micro-organisms on nitric acid contained as nitrates in nutritive solutions. About half of the forms (all of which were obtained from air and water and cultivated in a state of purity) reduced the nitrates to a greater or less extent to nitrites. No effect was produced by the exclusion of air. The author suggested that the difference in reducing power may in certain cases be available as a means of distinguishing micro-organisms morphologically very similar.

SURFACE WELLS IN A CEMETERY.

LAST year the East Ham Local Board wrote to the City Commissioners of Sewers, calling their attention to the fact that in the City of London Cemetery at Ilford six or seven wells were daily used for drinking purposes. This very serious allegation was promptly investigated by the Commissioners on the recommendation of their medical officer of health. The results were a full inquiry and a report from Dr. Sedgwick Saunders, which has very properly been published. Dr. Saunders analysed with the greatest care, not only all the waters implicated, but also samples drawn under similar conditions from the supplies of the East London, New River, and Kent Water Companies. The analyses are given in tables, with commentaries which render them intelligible to all. They are pretty much what might have been expected. All the samples of well-waters were bad and unfit for domestic use, some were most dangerous, and one was properly described as "horribly polluted." Dr. Sedgwick Saunders has rendered good service to public health by his thorough exposure of a grave danger, and the Commissioners must be congratulated on the promptness and vigour which they displayed in the matter. We presume that the use of the wells will be interdicted without delay, and the ordinary service of the East London Water Company substituted for them.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign eminent medical and scientific men are announced:—Dr. J. Schiffer, *privat-docent* in Experimental Pathology in Berlin, at the age of forty-five. During the Franco-German war he suffered from a severe form of malarial fever, which undermined his health and interfered with his work, which is said to have been of a very high order, as he was looked upon when a young man as one of the most promising original observers in Berlin.—Dr. Julius Telke, Surgeon-General in the German Army.

THE CROWN PRINCE.

THERE is one satisfactory item of intelligence from San Remo this week, and it is that all the physicians and surgeons in attendance upon the Crown Prince are agreed as to the nature of his malady. It is of great importance that there should be this unanimity among professional advisers, and we hope that there will be no further reports of disagreement. It is not stated what conclusion they have come to as to the diagnosis, and, so far as the bulletins are concerned, we are left in the dark as to whether all are now agreed that the disease is or is not malignant. Professor Waldeyer's report upon the microscopical examination of the sputum has not been made public. The Crown Prince has been out in his garden, and is reported to be free from cough and other discomforts.

At the moment of going to press the following telegram from San Remo reaches us: "Patient's strength gradually restored; larynx not quite so free as it was a few days after operation."

TAUNTON SANITARY HOSPITAL.

FOR upwards of seven years this hospital has served a most useful purpose in the urban and rural districts of Taunton—no less than 686 persons, who would otherwise have run risk of spreading infection in and around their homes, having been received into it. During the year ending September, 1887, the admissions were 93 in number, 76 being cases of scarlatina; and a sum of £371 0*s.* 8*d.* was incurred in maintaining the work of isolation. Only 2 cases of death occurred; and hence, quite apart from the large expense which the community would have had to incur had these 93 patients formed centres of infection, a distinct saving of life has been effected by the excellent institution which is carried on for the combined sanitary authorities under Dr. Alford's supervision.

FEVER IN LONDON.

ONLY 86 cases of scarlet fever were admitted into the hospitals of the Metropolitan Asylums Board during the week ending March 3rd. This is a slight decrease upon the number in the preceding week. Enteric fever contributed 11 cases, and small-pox rose from 2 to 7 cases. Patients suffering from the last disease were admitted from the following districts:—Bethnal-green 3, Clerkenwell 1, Poplar 2, and St. George's-in-the-East 1.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Hamburger of Bonn has been invited to accept the Botanical chair which has been declined by Professor Solms-Laubach, who has decided to go to Strasburg instead. Two large classes for military surgeons, after the manner of post-graduate courses, will be held here.

Buda-Pesth.—Professor Géza Antal has been appointed Senior Physician to the Dermatological and Syphilitic Clinic, in succession to Dr. Poor, who is retiring on a pension.

Dorpat.—Dr. Otto Kustner of Jena has been invited to accept the Professorship of Midwifery, in succession to Professor Runge, who has gone to Gottingen.

Jena.—Dr. Riedal, senior surgeon to the Mariahilfs hospital in Aix-la-Chapelle, has accepted an invitation to the chair of Surgery.

Konigsberg.—Dr. Michelson has qualified as *privat-docent*.

Leipsic.—The names of Professor Erb of Heidelberg and Professor Liebermeister of Tubingen are being brought forward in connexion with the chair of Special Pathology and Therapeutics, vacated by the death of Professor Wagner.

Rome.—The foundation stone of a new Polyclinic Institute has recently been laid. It will be named after Umberto I.

Zurich.—Dr. Wyder, the newly appointed Professor of Midwifery, will take up his duties on April 1st.

A MAUSOLEUM FOR A MARTYR TO SCIENCE.

THE remains of Don Daniel A. Carrion—the Peruvian student who, in an attempt made about two years ago to inoculate himself with the disease known as "verruga," in order to obtain material for the study of its etiology (for the purpose of a graduation dissertation), succeeded so well that he sacrificed his life—have recently been transferred from the general cemetery in Lima to a handsome mausoleum which had been prepared to receive them, by means of subscriptions raised by *El Monitor Médico*, a well-known Peruvian medical journal. The ceremony is described as having been very impressive, being attended by representatives of the medical and scientific societies and the press, and a number of eulogistic funeral orations being pronounced by distinguished medical men.

WITH one exception, the oldest Fellow of the College of Physicians has passed away in the person of John Burdett Steward, M.D. Camb., whose death occurred on the 5th inst. at Sandown, I.W., in the ninety-fifth year of his age. Dr. Steward obtained his M.D. degree in 1829. He was elected to the Fellowship of the College in 1831, and gave the Harveian Oration in 1855.

IN the *Boletin Clinico* of Lerida Señor Llorens mentions a case of intra-uterine dentition. He recently attended a woman in humble circumstances in Barcelona during a premature confinement at six months. The child had already cut the four incisors and the two lower canines. Had the woman gone her full time the dentition would have been probably much further advanced.

SURGEON C. J. ADDISON, Medical Staff, who successfully established an Ambulance Association in Quetta last year, has now organised a similar Association at Umballa, to which station he has lately been transferred. The "Umballa Ambulance Association," which is under the patronage of Major-General D. MacFarlan, Commanding the Sirhind Division, appears to be meeting with much success.

DR. P. G. UNNA of Hamburg announces that at the beginning of April he will commence a course of Dermatology for medical practitioners, the course to include the histology, bacteriology, diagnosis, and treatment of skin diseases. The course will extend over several months.

THE committee charged by the Belgian Academy of Medicine to report on the dangers of public experiments in hypnotism has come to the conclusion that they are dangerous both morally and physically, and recommends their prohibition.

DR. JAMES BELL, D.Sc., F.R.S., Principal of the Chemical Department, Somerset House, has been unanimously elected President of the Institute of Chemistry of Great Britain and Ireland, on the retirement of Professor Odling, M.B., F.R.S.

THE vacancy in the post of surgeon to Charing-cross Hospital caused by the retirement of Mr. R. Barwell, F.R.C.S. Eng., has been filled by the appointment of Mr. John H. Morgan, M.A. Oxon., F.R.C.S. Eng.

WE regret to have to announce the death, at Cannes, on the 4th inst., of Thomas Blizard Curling, F.R.C.S., F.R.S. Mr. Curling was in his seventy-seventh year. He became a Fellow of the College of Surgeons in 1843, and had filled the offices of President, member of the Council, and member of the Board of Examiners at the College.

Pharmacology and Therapeutics.

ACEPHENETIDIN AS AN APYRETIC.

DR. J. GEORGIEVSKI publishes in the *Vrach* an account of a series of observations made by him in Professor Lesh's clinic in St. Petersburg on acephenetidin, a substance which appears to act as an apyretic, and to possess several advantages over other drugs which are used for this purpose. Observations on the action of acephenetidin have been published both by Hinsberg and Kast, and by Kobler during the last twelve months. Both the papers state that ten-grain doses have no effect on healthy persons, but that from five to ten grains produce a reduction of 3° or 4° F. in persons with fever, also that no unpleasant symptoms are caused. Acephenetidin occurs as a crystalline powder of a greyish rose colour. Its formula is $C_{10}H_{13}NO_2$, or $C_6H_4 \begin{cases} C_2H_5O \\ NH(C_2H_3O) \end{cases}$; being, in fact, benzol C_6H_6, in which two atoms of hydrogen are replaced by compound radicals, as shown. It has no taste or smell, and is at the temperature of the body almost insoluble in water, acids, alkalies, gastric juice, and pancreatic juice. In alcohol it dissolves in the proportion of 1 in 20. It arrests the alcoholic fermentation of grape sugar. In order to test the action of the drug on the healthy body, Dr. Georgievski took thirty grains a day in three doses of ten grains each, separated by intervals of an hour. This was about half a grain per kilogramme of body weight, or about three times as much as the doses used by Hinsberg and Kast. The only sensation produced was a slight feeling comparable to the beginning of alcoholic intoxication. No reduction of temperature was produced, though the drug was taken for some days. The colour of the urine was unchanged, but when a few drops of solution of chloride of iron were added to it, it gave a reddish-brown or black colour. Sulphate of copper gave a somewhat similar reaction. The urine was affected in half an hour after taking the dose, the reaction being much more distinct in two hours, remaining very strong till the fourth hour, after which it gradually became weaker, but did not entirely disappear even in the course of twelve hours. Observations were made on thirty febrile patients, including cases of phthisis, typhoid, typhus, acute rheumatism, croupous pneumonia, eryeipelas of the face, quinsy, diphtheria, and pleurisy. A single dose of from three to five grains was sufficient to lower the temperature. Usually in half an hour it had gone down nearly 1°. This reduction continued, the lowest point being reached in three or four hours after the dose had been taken. The subsequent rise which then began was very gradual, the original height not being reached for five or six hours more. As a rule, a three-grain dose reduced the temperature 1·8°, and a five-grain dose 3·6°. It appeared to be more advantageous to give five or ten grains all at once than in two or three divided doses at an hour's interval. The nature of the disease seemed to have a decided influence on the effect of the medicine; thus in phthisis, typhoid, and pleurisy, in which affections the temperature curve generally shows great variations, acephenetidin produced a greater and more prolonged reduction than in the diseases like pneumonia and typhus, in which there is a less variable temperature. When complications occurred, occasioning a rise of temperature, the action of the acephenetidin was weakened and large doses were required; thus during the course of acute rheumatism, when fresh joints were being attacked, the drug had but little effect. Like other antipyretics, acephenetidin appears to have a powerful analgesic action. Dr. Georgievski gave it with most satisfactory results in cases of cephalalgia, neuralgia of the fifth, and migraine. The dose in these cases was ten grains, with directions to repeat it or to take five grains in an hour's time, if necessary. Dr. Georgievski invites other medical men to give this drug a trial, the only objection to it being its high price. It can be obtained from Bayer, of Elberfeld, and costs about 1*s.* 9*d.* a drachm.

STYPAGE.

Dr. Edward de Smet of Brussels writes in *La Clinique* in warm praise of M. Bailly's system of "stypage," or local freezing by means of pledgets of lint steeped in chloride of methyl. This method is useful not only for operative purposes but acts therapeutically in many nervous and other disorders. Dr. de Smet mentions a case of severe symptomatic pain in the fifth associated with tonic spasm of

the masseter, which had persisted for more than a year, and which had been treated in various ways without success, but which immediately yielded to "stypage," the pain and trismus ceasing entirely, of course to the great astonishment of the patient. *Apropos* of this case, M. Bailly told M. de Smet of a case of idiopathic tetanus which had lasted twenty-eight days, and which had been cured by "stypage" over the maxillæ repeated daily, together with similar applications all along the spine and over the tetanised muscles of the inferior extremities. Each "stypage" was followed by the disappearance of the tetanus and the pain, the patient being free to eat and sleep for about twelve hours. The original plan, proposed by M. Debove, of directing a jet of chloride of methyl over the course of the nerve for sciatica, was cumbersome and expensive, the apparatus required costing about £4. It was also not free from inconveniences, for the refrigeration could not well be regulated, and so it sometimes proceeded too far. Now, however, similar, or even better, results can be obtained by a much simpler and safer method—the cost of the apparatus required, which M. de Smet understands will be ready for sale in a few days, being also very moderate. Stypage has been recently employed in France by MM. Dieulafoy, Bucquoy, Féreol, Lailler, Pozzi, Bouchard, and others, and has been found to be useful, not only in neuralgic affections, but in hepatic colic, muscular pains, lead colic, chronic gout, the stabbing pains of pleurisy and phthisis, the dyspnœa of emphysema, and even in the severe pain of uterine cancer.

UNIVERSITY OF LONDON: MEETING OF CONVOCATION.

CONVOCATION AND THE SENATE.

A MEETING of Convocation was held on the 6th inst., Dr. F. J. Wood, chairman of Convocation, presiding. The result of the ballot for the nomination of members for the Senate was declared in the course of the meeting as follows: Mr. James Anstie, B.A., Q.C., 456; Mr. Edward Henry Busk, M.A., LL.B., 367; Mr. Henry Arthur Nesbitt, M.A., 35. The names will be submitted to the Crown in the order here given.

Professor S. P. THOMPSON, D.Sc., moved: "That, whereas it is advisable to secure the presence in this Convocation of those who are actively engaged on the teaching staff of University College and King's College, Convocation hereby respectfully invites the Senate to consider whether it would not be desirable to act upon the powers conferred upon it by Article 40 of the Charter of the University, and, by conferring *ad eundem* degrees upon those graduates of other Universities who hold professorships in University College and King's College, enable Convocation to admit them to its membership." He thought it would be to the advantage of the University if those engaged in teaching could be so admitted into Convocation, but would distinguish between those who thus received *ad eundem* degrees and those who obtained degrees by examination.

The motion was seconded by Mr. R. RABSON, but opposed by several members on various grounds, such as that it would tend to lower the value of the degrees of the University, that there was no need for such a change in the constitution, that little advantage would accrue from it, and that it was undesirable to confer such degrees upon teachers, who were a fluctuating body. The motion was lost by a large majority.

Dr. M. BAINES moved: "That Convocation disapproves the course pursued by the Senate with reference to a petition to the Crown of the Royal College of Physicians of London and the Royal College of Surgeons of England for a Charter enabling them to confer degrees in Medicine." He said that the conditions which the Senate attached to their resolution—viz., that the degrees in question should not be confounded with the degrees of the University, and that the preliminary examinations required by the Colleges should not be inferior to those required of candidates for medical degrees at other Universities, were conditions which could not be enforced. He pointed out that the Colleges had practically given over the function of examining in preliminary education to the Society of Apothecaries and the College of Preceptors. There were radical faults in the scheme, which gave to a Senate of physicians and surgeons—a mere medical faculty—powers to grant degrees that belonged to a university—a wholly unprecedented idea, and one which dislocated a medical degree from any connexion with education in Arts. The College of Music had been cited as an exception, but that College was a *teaching* body. Then the scheme of the Royal Colleges was so framed that the Senate would be self-elected, and would be without control by its graduates. In fact, the two Colleges would be supreme and autocratic; even the medical schools would not be represented. He alluded to the history of the College of Surgeons as evidence that the Members of that body would have no voice in the proposed Senate, and he felt that it was a pity the Senate of the University did not see its way to oppose, or at least to watch, the petition of the Colleges, which he could not help thinking were actuated by greed in promulgating this scheme.

Mr. WHITEHEAD, B.A., seconded the motion, and read the following extract from the minutes of the Senate (Jan 11th, 1888):—

"Motion made (Dr. Quain): That a statement to the following effect be submitted to the Lords of the Council with reference to the petition of the Colleges: That whilst the Senate of the University of London does not feel it necessary to offer any direct opposition to the petition of the Royal Colleges of Physicians and Surgeons seeking ability to confer degrees in medicine and surgery, the Senate desire—1. That if such powers be granted to the two Colleges, especial care be taken that the degrees to be conferred in virtue thereof may not in any way be confounded with the degrees conferred by the University of London. 2. That the preliminary education of those on whom medical and surgical degrees are conferred by the Colleges be not inferior to the like education of those who receive University degrees. (Especial stress is laid upon this condition.) 3. That the proposal of the Colleges to confer degrees on persons who have already passed the professional examination be not approved.

"Amendment moved (Sir EDWARD FRY): That, in the opinion of the Senate, it is expedient that the whole subject of the higher education in London, including the petitions of University College and King's College, London, and of the Royal Colleges of Physicians and Surgeons, should be considered by a Royal Commission; and that an expression of this opinion be humbly submitted to Her Majesty.

"Question put on the amendment:—Ayes: Dr. Buchanan, Mr. Thiselton Dyer, Mr. Fitch, Sir Edward Fry, Mr. Hutton, Dr. Pye-Smith. Noes: The Vice-Chancellor, the Dean of Westminster, Mr. Huxley, Dr. Johnson, Mr. Osler, Dr. Quain. The numbers being equal, the Chairman gave his casting vote against the amendment, which was lost.

"Question put on the original motion:—Ayes: The Vice-Chancellor, the Dean of Westminster, Mr. Huxley, Dr. Johnson, Mr. Osler, Dr. Quain. Noes: Dr. Buchanan, Mr. Thiselton Dyer, Mr. Fitch, Sir Edward Fry, Mr. Hutton. Motion carried."

He (Mr. Whitehead) thought it inconsistent that the Senate should oppose one of the schemes (that of University and King's Colleges) and not the other; and pointed out that their action in this respect was precisely contrary to that taken by the older universities.

Mr. NAPIER, LL.D., suggested that the motion might be amended as follows: "That Convocation desires respectfully to express its regret that the Senate has not seen fit to take active steps in opposition to the petition," &c. Were the Colleges of Physicians and Surgeons given this power, on what ground could similar powers be withheld from the Inns of Court or the Incorporated Law Society, or from the Institutions of Engineers, Architects, and Surveyors? It was common knowledge that the movement in the Colleges was initiated by the complaint that the standard of the University was too high for the students of the London medical schools; and in the interests of the public he protested against yielding to the notion that a medical degree should be degraded, or that it should not be held to imply general culture as well as special knowledge.

The amendment was seconded by Mr. O'REILLY, and accepted by the mover and seconder of the resolution.

Mr. SMITH OSLER, as one of the members of the Senate who voted in the majority, said that he was influenced largely by the arguments of eminent medical authorities, who declared that there does exist a practical grievance to

the medical students in London, where the only available graduation was of a standard far above that of any other university. In the eyes of the general public one degree stands as high as another, and the mere university argument that nothing but a fully formed university should grant medical degrees was, he thought, theoretical, and was outweighed by the practical grievance.

Dr. W. J. COLLINS supported the resolution, and contended that the alleged exodus of medical students from London to seek degrees elsewhere was not borne out by statistics. Already the action taken by the Colleges had led other similar bodies in other parts of the United Kingdom to ask for like powers, and he thought this petition should be opposed on the ground of medical education and of the public advantage.

Dr. COUPLAND said that the practical grievance alluded to by Mr. Osler had been amply proved to exist, and that every year an increasing number of English students were being attracted to Edinburgh and elsewhere, because the scientific curriculum demanded by the London University was far more stringent than elsewhere. It might be better if the Colleges could be merged in a Teaching University, so as to ensure that medical degrees should be bestowed after evidence of a certain degree of general education; but it was somewhat selfish of the University of London to oppose schemes to remedy a grievance which it could not, consistently with the maintenance of its own high standard, itself meet.

Mr. BENNETT, D.Sc., would not admit the existence of any such grievance on the part of the London medical students, and pointed to the recent extensions of buildings by various medical schools as evidence that they were not being deprived of pupils. He asserted that the best students were not driven away from London.

Dr. PYE-SMITH called attention to the fact that the M.D. degree does not in itself convey any other than a professional title; for there are Universities, such as Durham and Brussels, where no academical acquirements are imposed. Then as to the public interest, he asked if it were not true that a man who has taken the M.R.C.S. and L.R.C.P. is as really qualified, professionally, as many who have an M.D. degree. Whether the attempt of the Colleges to obtain the powers they sought or the action of the Senate in relation thereto were good was another question.

The motion was then put, and carried by a large majority.

Dr. J. B. BENSON moved: "That it be an instruction to the Special Committee of twenty-five appointed for the consideration of the Scheme for the Constitution of the University to report to this House the points of difference between, on the one hand, the University of London, both as now constituted and as proposed to be reconstituted under (*a*) the scheme of the Senate and (*b*) the scheme of this House, and, on the other hand, the proposed Albert University of London."

Mr. SPRATLING seconded the motion, which was opposed by Dr. NAPIER, on the ground that the Senate and the House had already arrived at a decision on the matter.

Sir PHILIP MAGNUS thought the discussion was very unnecessary, inasmuch as the House had come to a conclusion—a right conclusion, he thought—at its last meeting. Moreover, before the scheme of the Senate could be carried a new Charter would have to be applied for, and that would need the assent of Convocation. Then the whole matter might be fully considered.

The resolution was rejected by a small majority, and the House adjourned.

REPORT ON THE PREVALENCE OF ENTERIC FEVER IN THE ROYAL BARRACKS, DUBLIN.

IN consequence of an outbreak of enteric fever amongst the troops quartered in the Royal Barracks, Dublin, Dr. Grimshaw, Registrar-General for Ireland, and Sir Charles A. Cameron, Medical Officer of Health for Dublin, were requested by the Secretary of State for War to make an inquiry into the circumstances connected with the prevalence of fever in the Royal Barracks from January, 1879, to October, 1887. Their report, dated Nov. 23rd, commences with a description of the site of the barracks and the adjoining premises in Arbour-hill, its geological structure and the surroundings, the plan and structure of the barracks, the sewers and drains, the water supply, milk supply, and impurities of the air. The site is considered favourable, but would be improved by subsoil drainage. The buildings are old and too crowded, and seem defective in ventilation; the waterclosets are stated to be defective and the latrines badly planned; the filthy urine tubs are still in use in the barrack rooms at night; and the system of ventilation of the sewers is considered objectionable. The water supply is good, but the milk is of very bad quality. In the section on the prevalence of disease and mortality the number of cases of enteric fever, diarrhœa, diphtheria, and pneumonia admitted to hospital in each of the years 1883-87 inclusive is given in a table, but we find no statement of the strength of the troops among whom they occurred. The admissions by enteric fever are stated to have been 26, and of these 5 died; but in a subsequent part of the report it is shown that the cases, in and out of hospital, were 11 in 1886 and 27 in the first three-quarters of 1887.

The report states that, with a view to test the question whether there has or has not been a comparative excess of prevalence of enteric fever in the Royal Barracks, "tables have been prepared showing the relative mortality of the troops in the United Kingdom, in Ireland, and in Dublin, during the period immediately preceding that which led to the present inquiry—namely, from 1881 to 1885 inclusive; the relation between the mortality of the troops and the general population; and, in a similar manner, the relative mortality among the troops from certain zymotic diseases, and from enteric fever especially." It is to be regretted that in all the tables in the report the ratios per 1000 only are stated, and not the numbers from which these have been calculated, and thus no means are given of testing the accuracy of the tables. According to the table showing the prevalence of enteric fever, in the last three years there have been 3·5 cases per 1000 of the strength in the Dublin Garrison, in the last four years 2·5 per 1000 in the Home and Woolwich Districts, and in the last five years 2·5 per 1000 in the Dublin District. It is not very clear why the Home and Woolwich Districts have been united in this table; if the comparison had been made with the Home District alone, the proportion of cases would have been found to be 3·9 per 1000. The ratio of deaths was ·79 per 1000 in Dublin, ·47 per 1000 in the Dublin District, and ·40 in the Home and Woolwich Districts, but it was ·61 in the Home District taken by itself. In the comparison of the death-rate by enteric fever in the civil population and the troops respectively a serious error has been committed: the male population between the ages of fifteen and forty-five have been assumed to form a fair standard of comparison with the military, but no account has been taken of the age distribution of the two classes respectively. Enteric fever is a disease which is more fatal at the ages 20-25 than at any other period of life, the death-rate decreasing steadily after that age. But the relative proportion living between 18 and 25 is much greater in the military than the civil population. In the report the death-rate from enteric fever in the United Kingdom between 18 and 45 is stated at ·28, and among the troops at ·31, and the conclusion is drawn that "in the case of enteric fever the mortality among the troops is higher generally than in the civil population." But if the necessary correction be made and the death-rate calulated in a population corresponding with the ages of the men serving in the army, as given in the annual return for 1886 by the Adjutant-General, the civil rate would be ·34, instead of ·28, and would thus show a difference of ·03 in favour of, instead of against, the military, as stated in the report. This is an error very frequently committed in comparisons of death-rates—a neglect of the *age distribution* of the different classes. The correction appears to us to vitiate the conclusion "that the death-rate from enteric fever is much in excess of that of the civil population. ..... These facts are very remarkable, the most remarkable being that enteric fever seems to be more prevalent among soldiers than among the civil population, although in other respects the health of the troops is better than that of the civil population." It must also invalidate the "reasons why soldiers are especially liable to enteric fever."

The cases of enteric fever in the Royal Barracks in the seven years 1879-85 amounted to 27, in 1886 to 11, and in the first nine months of 1887 to 27. There does not appear during these years to have been any correspondence in its prevalence among the civil and military populations. A plan of the Royal Barracks attached to the report shows

the localities in which the cases of enteric fever were quartered previously to their illness. From this we find that in 1886–7 there were 14 cases from the soldiers' quarters on the west side of Palatine-square, and none from the officers' quarters on the east side; there were 6 from the west side, 3 from the north end of Royal-square, and none from the east side; there were 2 from the west, 2 from the north, and 1 from the east side of Cavalry-square; and 1 each from the Horse-square and the infantry recreation rooms. Unfortunately, no information is given as to the numbers occupying the quarters in each of these squares, but there seems a marked preponderance of cases from Palatine-square. The report goes on to say: "It will thus be seen that the disease has been only prevalent in an epidemic form among the officers, women and children of the cavalry, and among the men located in certain portions of the infantry quarters. The cases of the cavalry officers may all be fairly attributed to the causes which we have shown to exist in connexion with the cavalry mess; and those among the women and children are attributable to the constant use of the rather ill-kept latrines in the lane along the west side of the barracks. In the case of the men among the infantry, we think the cause may reasonably be attributed to the facility given for the spread of the disease through the latrines used in common by all the men, together with the unfavourable hygienic conditions under which they are quartered. We cannot, however, leave unnoticed the suspicious nature of the milk supplies, which, although we are unable to give it as a cause of infection, may have been a source of mischief, and one which should be provided against in future." We confess with much regret that we are far from satisfied with these conclusions. The inquiry does not seem to us to have reached the cause of the epidemic. The three cases of the cavalry officers may very probably have been caused by the defective state of the watercloset, in close proximity to the mess-room and quarters of the cavalry officers, the connexions of which with the main sewer were found to be very defective. In the two women also the "rather ill-kept latrines" may perhaps have had some influence, but under a good regimental system such a state ought not to exist. But as regards the cause assigned for it among the men, we are not aware of any clear and conclusive evidence which shows that enteric fever can be propagated by the use of a common latrine if the necessary steps are taken to keep it clean and to flush it regularly. But the most unsatisfactory part of the report is, to our mind, that which treats of the milk supply. The milk delivered by the contractors at the Royal Barracks was analysed and found to be adulterated with water in degrees varying from 19 to 26 per cent., and a specimen of milk retailed in the barracks was found to have 38 per cent. of added water. The reporters were unable to ascertain that there had been "any cases of typhoid fever amongst the persons engaged in supplying milk to the Royal Barracks." But we are not told whether steps were taken to find out whether any of the other customers of these milkmen were so affected. It was exactly one of those cases in which such an inquiry—conducted as it has been in so many instances in this country—was imperatively required, for it seems highly probable that the cause of the epidemic may have been impure water used for the purpose of adulteration. The result of the analyses shows the necessity for some alteration in the mode of supply, some check to ensure that the milk contracted for is duly supplied, and not a fraudulent and possibly dangerous compound in lieu of it. We would call the attention of the Secretary of State for War to this subject, in the hope that some effectual guarantee may be found for the genuine quality of so important an article of consumption in the Army.

The recommendations founded upon the report appear for the most part judicious and calculated to improve the health conditions of the barracks. Among them, however, we find "discontinuance of present system of ventilating main sewers by shafts against or near inhabited buildings ..... Sewers in future to be ventilated by single upcast shafts, placed so as to be clear of all buildings." Surely this would involve a great and most unnecessary expense. If a ventilating pipe, with the joints carefully cemented, is carried to a sufficient height above the eaves of a house and kept at a proper distance from the openings of chimneys, it cannot be productive of more harm than would arise from a brick shaft at a little distance from the house. It would involve much greater expense, and thus probably be the means of preventing a useful and very necessary amount of ventilation being provided. Another of the recommendations which is open to discussion is that of providing a special hospital for the treatment of infectious diseases in the garrison. It remains yet to be proved whether this concentration of cases is not fraught with danger to the surrounding population, and the removal of cases to the special hospital attended with considerable risk to the patient.

AN END OF THE ALKALI-WASTE NUISANCE.

AN ancient and most serious nuisance seems at last destined to extinction. Many of our readers are familiar with, and not a few have suffered from, the foul emanations emitted from the vast piles of alkali waste, or vat waste, as it is often called, which surround some of the great alkali works of the country. The nuisance dates from 1823, when the ingenious process of Leblanc, the French apothecary who made so many millionaires, and who died himself in a French workhouse, was first adopted in England. This process, which is still extensively used, although of late it has suffered from a formidable rivalry, consists in the conversion, by three distinct methods, of common salt into carbonate of soda. The alkali manufacture, as a whole, comprises far more than this, for sulphate of soda, hydrochloric acid, bleaching powder, caustic soda, bicarbonate of soda, chlorate of potash and other chemicals, are also produced in the cycle of operations. Each contributes to the profits, and each is the starting-point in one or more important industries. Common salt is the first raw material, and the magnitude of the trade may be inferred from the fact that in 1887 no less than 731,199 tons were decomposed by the Leblanc and its modern rival the ammonia-soda process. Of late years the Leblanc makers have held their own with difficulty against the firm of Brunner, Mond, and Co., of Northwich, who have in England a monopoly of the ammonia-soda process. The nuisance to which we now refer arises only in the Leblanc method, and it has long formed a serious part of the difficulties with which the older manufacturers have had to deal. The nature of the nuisance is as follows. Salt is converted into sulphate of soda by sulphuric acid. The sulphuric acid was formerly made from Sicilian sulphur, but pyrites ore, being cheaper, has long been substituted for it. By ignition with chalk and coal, the sulphate of soda is transformed into a mass called "black ash," which is a mixture of carbonate of soda, sulphide of calcium, and impurities. The carbonate of soda is washed out and evaporated, while the residue is thrown away. It is this residue which is known by the name of "alkali waste." It contains almost the whole of the sulphur of the original sulphuric acid in the form of sulphide of calcium. Now sulphide of calcium is easily decomposed by acids, with evolution of sulphuretted hydrogen; and, as the rain which falls in manufacturing towns is strongly acid, the drainage from the heaps of waste to which we have referred pollutes air and water with the odour of rotten eggs. Those who have visited St. Helens in Lancashire, and wandered by the mountains of alkali waste which cumber its plain, and by the unfortunate Sankey brook which flows among them, can realise the nuisance for which the alkali makers are responsible. The water of the Sankey looks like pea-soup and smells like a cesspool.

Many attempts have been made during the last fifty years to recover the sulphur from alkali waste, and so yield a new profit to the manufacturer, while annihilating a terrible nuisance. Mr. Alexander Chance, of the firm of Chance Brothers and Co., Birmingham, in a paper which he read to the London Section of the Society of Chemical Industry on the 5th inst., alluded to some of these attempts, those of the late Mr. Gossage, Mr. Mond, and Messrs. Schaffner and Helbig being among the most successful. But the main object of Mr. Chance's paper was to describe a system which he has adopted in his works, which not only avoids all risk of nuisance, but offers many commercial advantages. The first part of the new system consists essentially in treating the alkali waste with carbonic acid from the limekiln. Lime

is required for the manufacture of caustic soda, so that carbonic acid is a by-product. The carbonic acid when passed into the waste is at first absorbed by the free lime. When this is saturated the gas acts on the sulphide of calcium, which at first is converted into sulphydrate. During this stage of the working nitrogen only is evolved, and the special novelty of the Chance patent is the removal of this inert gas at periodical intervals. The further action of carbonic acid on the sulphydrate yields calcium sulphate, and a gas containing about 30 per cent. of sulphuretted hydrogen and 70 per cent. of nitrogen. The sulphuretted hydrogen is now pure enough to burn, and the sulphurous acid thus formed can be converted directly into sulphuric acid in the ordinary manner. Messrs. Chance have made large quantities in this way, and the acid obtained is of excellent quality, and entirely free from arsenic. But a more profitable alternative exists, and has been introduced with the most satisfactory results in the Birmingham works. Mr. C. F. Claus, whose method for purifying coal gas is now under trial on a large scale in the Belfast Gas-works, has invented a method of obtaining sulphur from sulphuretted hydrogen which is as simple and inexpensive as it is efficient. This method, which is already in extensive use in chemical works where sulphuretted hydrogen is evolved, consists in mixing the gas with air enough to oxidise the hydrogen, but not the sulphur, and then passing the mixture through what is known as the Claus kiln. This is merely a brick chamber with a false bottom, which contains a layer of oxide of iron, or some other suitable substance, which, reacting on the mixture of gases, causes the formation of sulphur and water without permanent alteration of the oxide. The necessary temperature is maintained by the heat of the reaction. The vapours which leave the kiln consist mainly of sulphur and steam with nitrogen. They pass into a receiving chamber, in the first part of which melted sulphur collects and can be drawn off into moulds, while a little further on flowers of sulphur of the finest quality are obtained.

The commercial importance of this system is easily understood. At present the whole of the sulphur of the sulphuric acid, amounting in England to about 100,000 tons a year, is thrown away. Now all this will be altered. The sulphur can be recovered at a slight expense, and with very little trouble. It may be converted into sulphuric acid, in which case very little pyrites will be wanted, or by the Claus process it can be obtained in an almost chemically pure state. Pyrites sulphur at present costs about £1 10s. per ton, whereas pure sulphur sells in the market at from £4 to £9 per ton. The alkali waste after the new treatment is perfectly innocuous. It may be thrown anywhere without the possibility of a nuisance arising from it. But doubtless it will be utilised either in the black ash process or in the manufacture of cement. Altogether, it is not surprising that so large and influential an audience should have assembled on Monday in Burlington House to hear Mr. Chance's paper. Every sanitarian, as well as everyone interested in the commercial prosperity of the country, must wish success to the new enterprise.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hereford Combined Districts.—Dr. Sandford is always to the fore as regards printed reports from the English combined districts, and again this year his fourteenth annual report reaches us early. In the city of Hereford the death-rate for 1887 was 18·6 per 1000. The want of a system of compulsory notification of infectious diseases is spoken of, but there is no reference to a sanitary hospital which would give effect to the information thus to be obtained. In the Hereford rural district diphtheria caused 7 deaths, 6 occurring in Dewchurch out of 14 attacks, and Dr. Sandford submits that in one case the spread was due to one of the sick sleeping with others, a method of spread which is certainly by no means uncommon. Well water was in some instances found to be polluted, and it is clear that a pure supply should be obtained. In the Ledbury district an extension of water service will, it is hoped, tend to diminish the scarcity of supply which was experienced during the past summer. In the Bodenham district the impure state of the water is stated to be without doubt the cause of an outbreak of diphtheria; and an instance is also recorded of a lad who, being thirsty, stooped to drink from the river Lugg, below the spot where the Leominster sewage entered, and where the water was almost stagnant, with the result that he died in forty-eight hours of diphtheria. Generally, the report indicates some progress in sanitary administration, but there are conditions which still leave ample room for further sanitary reform.

Holdsworthy Rural District.—On a diminishing population of some 9000 the birth and death-rates for 1887 were 31·9 and 15·2 per 1000, and Mr. Linnington Ash devotes a considerable portion of his report to an examination of the statistical aspect of these and other rates. The district was exceptionally free from epidemic diseases during the year, although at one time it was threatened on account of a serious outbreak of enteric fever in the Bible Christian Ladies' College near by. Some progress is being made as to the water supply of the district; but Holdsworthy town still remains dependent on shallow wells liable to pollution, and giving a most meagre supply during such periods of drought as have been recently experienced. This, in 1886, led to the opening up of disused wells; but recently several new ones, including three public ones, have been sunk. Works of drainage and improvement in the amount and character of privy accommodation still call for action on the part of the authority.

Poole Urban and Port Districts.—In the town of Poole the death-rate for 1887 was 15·8 per 1000. Scavenging, flushing of sewers, and the maintenance of a sufficient and wholesome water supply, together with inspections of slaughterhouses and bakehouses, have all been maintained, and Mr. Lawton expresses himself as satisfied with the result. In the port vessels are inspected, and those engaged in the coasting trade are referred to as in a fair state as regards cleanliness, lighting, and ventilation.

Wellingborough Rural District.—This district contains a number of localities which are, in effect, small towns having urban requirements. Model bye-laws as to new buildings have already been introduced into Rushden, and it is evident that a public water service is also needed there. The pail-closet system is largely adopted in the place, and there is a weekly system of scavenging, but it is clear that a system of sewerage is also needed, for in the absence of it the water-course is but a sewer, and Mr. H. Thomas finds it necessary to suggest that where waterclosets are in use they should empty into a tank, and not into the drains, which, legally, constitute sewers, and which the inhabitants have a right to use as such. The annual death-rate for 1887 was 14·9 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6121 births and 3875 deaths were registered during the week ending March 3rd. The annual rate of mortality in these towns, which had been 20·9 and 21·6 per 1000 in the preceding two weeks, was last week 21·5. During the first nine weeks of the current quarter the death-rate in these towns averaged 22·3 per 1000, and was 1·8 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 13·4 in Sunderland, 14·3 in Bradford, 16·0 in Huddersfield, and 17·5 in Bolton. The rates ranged upwards in the other towns to 25·5 in Derby and in Cardiff, 25·7 in Manchester, and 34·2 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 405 and 429 in the previous two weeks, declined last week to 366; they included 136 from whooping-cough, 59 from scarlet fever, 42 from measles, 39 from "fever" (principally enteric), 37 from diphtheria, 28 from diarrhœa, and 25 from small-pox. No death from any of these zymotic diseases was registered last week in Halifax, whereas they caused the highest death-rates in Plymouth, Sheffield, Wolverhampton, and Blackburn. The greatest mortality from whooping-cough occurred in London, Norwich, Leicester, Bolton, and Wolverhampton; from scarlet fever in Cardiff and Blackburn; from "fever" in Cardiff, Derby, and Nottingham; and from measles in Wolverhampton and Plymouth. The 37 deaths from diphtheria in the twenty-

eight towns included 24 in London, 5 in Manchester, and 2 in Sheffield. Small-pox caused 21 deaths in Sheffield, 1 in Leeds, 1 in Manchester, 1 in Nottingham, and 1 in Bristol, but not one in London or in any of the twenty-two other large provincial towns. The Metropolitan Asylum Hospitals contained 13 small-pox patients on Saturday last (including 7 admitted during the week), against 6 at the end of the previous week; the Highgate Small-pox Hospital contained 1 patient on Saturday night. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1363 at the end of last week, against numbers declining steadily in the preceding thirteen weeks from 2764 to 1377; the 91 cases admitted to these hospitals during the week showed a further decline from recent weekly numbers. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding six weeks from 591 to 478, were last week 488, and were 9 below the corrected average. The causes of 87, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Portsmouth, and in five other smaller towns; the largest proportions of uncertified deaths were registered in Sheffield, Preston, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·5 and 22·6 per 1000 in the preceding two weeks, further rose to 23·4 in the week ending March 3rd; this rate exceeded by 1·9 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 12·2 and 16·0 in Greenock and Perth, to 24·6 in Dundee, 25·3 in Paisley, and 27·5 in Glasgow. The 592 deaths in the eight towns showed a further increase of 21 upon the numbers returned in the preceding two weeks, and included 28 which were referred to whooping-cough, 14 to measles, 9 to diphtheria, 7 to diarrhœa, 6 to scarlet fever, 2 to "fever," and not one to small-pox; in all, 66 deaths resulted from these principal zymotic diseases, against 62 and 61 in the preceding two weeks. These 66 deaths were equal to an annual rate of 2·6 per 1000, which exceeded by 0·6 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 21 and 32 in the preceding two weeks, declined again last week to 28, of which 17 occurred in Glasgow, 6 in Edinburgh, and 4 in Leith. The 14 deaths from measles showed an increase of 5 upon the number in the previous week, and included 6 in Leith, 5 in Edinburgh, and 3 in Glasgow. The deaths from diphtheria, which had been 13 and 7 in the previous two weeks, rose again last week to 9; 4 were returned in Glasgow and 2 in Paisley. The 6 fatal cases of scarlet fever also showed an increase upon those returned in the previous week, and also included 4 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 148 and 135 in the preceding two weeks, rose last week to 153, and exceeded by 11 the number returned in the corresponding week of last year. The causes of 73, or 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25·9 and 28·4 per 1000 in the preceding two weeks, further rose to 34·0 in the week ending March 3rd. During the first nine weeks of the current quarter the death-rate in the city averaged 31·9 per 1000, the mean rate during the same period being 22·5 in London and 23·0 in Edinburgh. The 230 deaths in Dublin showed a further increase of 38 upon the numbers returned in the preceding two weeks; they included 6 which were referred to whooping-cough, 5 to "fever" (typhus, enteric, or undefined), 5 to scarlet fever, 3 to measles, 3 to diphtheria, 2 to diarrhœa, and 1 to small-pox. Thus the deaths from these principal zymotic diseases, which had been 17 in each of the preceding two weeks, rose last week to 25; these deaths were equal to an annual rate of 3·7 per 1000, the rate from the same diseases being 2·3 in London and 3·0 in Edinburgh. The fatal cases of whooping-cough and of "fever" showed an increase of 2 upon the numbers returned in the previous week, while those of scarlet fever, which had been 7 and 8 in the previous two weeks, declined last week to 5. The deaths from measles, diphtheria, and diarrhœa exceeded the numbers returned in the previous week; and the fatal case of small-pox was the first recorded in the city since the beginning of this year. The deaths of infants corresponded with the number returned in the previous week; while those of elderly persons showed an increase of 14. Ten inquest cases and 8 deaths from violence were registered; and 59, or rather more than a quarter, of the deaths occurred in public institutions. The causes of 30, or rather more than 13 per cent., of the deaths in the city were not certified.

VITAL STATISTICS OF NEW YORK IN 1887.

The city of New York had an estimated population of nearly a million and a half (1,481,920) in the middle of last year, implying an increase of more than a quarter of a million of persons since the last census in 1880. The recorded births (34,023) gave a rate of 23·0 per 1000 of the population, which cannot, however, be accepted as even approximately representing the true birth-rate, as the record of births is admittedly very deficient. As the marriage-rate of the New York population in 1887—that is, the rate of persons married—was equal to 18·4, and considerably in excess of the rate in London, the birth-rate in New York is probably not far short of that in London, which was 31·7 last year. It would thus appear that more than a third of the births occurring in New York are not recorded. It is a noticeable fact that 3100 still-births were recorded in New York last year, equal to nearly 10 per cent. of the total births, whereas the mean proportion of still births in those European countries where they are recorded is under 5 per cent. During last year 38,933 deaths were registered in New York, exceeding the recorded births by 4910. These deaths were equal to an annual rate of 26·3 per 1000 of the population, scarcely differing from the rates in the two preceding years, which were 26·2 and 26·0 respectively. This rate shows a striking excess upon the London rate, which was equally stationary—19·8, 19·9, and 19·6 in the same three years. It may be stated that 16,766, or 43·1 per cent. of the total deaths were of children under five years of age, the proportion in London being 42·8; the similarity of these proportions should not, however, be accepted as indicating the relative mortality at those ages in New York and London, as the proportion of the population at those ages is not stated in the return before us. Zymotic fatality accounts for a large proportion of the excess of the New York death-rate, compared with that in London. The death-rate from what is known as the principal zymotic diseases in New York last year was equal to 5·47 per 1000, while in London it was only 3·02. Small-pox caused 99 deaths, against but 9 in London, and the mortality from scarlet fever slightly exceeded the rate in London; while as regards measles the comparison was slightly in favour of New York. The death-rates from diphtheria, however, showed striking contrasts. Disregarding 889 deaths attributed to croup, the deaths referred to diphtheria in New York last year were 2167, and equal to a rate of 1·46 per 1000, and more than six times the rate from the same disease in London. On the other hand, the mortality from whooping-cough in New York was less than a fifth of that recorded in London. The death-rate from typhoid fever was 0·22 in New York, and although exceeding that in London, showed a decline from the rates prevailing in recent years. The rate from diarrhœal diseases was 2·53 in New York, against but 0·90 in London. The mortality from phthisis in New York was equal to 3·6 per 1000 last year, and just double the rate in London; while the rate from bronchitis and pneumonia was 3·7 in New York, and almost identical with the rate in London, which was 3·8. Further information as to the ages of the New York population, and the ages at which the deaths were recorded, is necessary in order to make a fully satisfactory comparison with the mortality in London, but the facts now to hand show that the excess of mortality in New York is to a very large extent due to the high death-rates from diphtheria, diarrhœal diseases, and phthisis.

OWENS COLLEGE.—At the half-yearly meeting of the Court of Governors held on the 6th inst., Dr. A. M. Paterson was nominated as Demonstrator and Assistant Lecturer on Anatomy in the College. At the same meeting it was resolved that, in accordance with the recommendation of the Council, the title of Emeritus Professor of Surgery be conferred on Edward Lund, F.R.C.S., on his resignation of the Professorship of Surgery on the 25th inst.

Correspondence.

"Audi alteram partem."

"TENOTOMY AND RAPID REDUCTION OF DEFORMITY."

To the Editors of THE LANCET.

SIRS,—Dr. Marshall, in your last issue, gathered[1] that I still divide the tendons in equino-varus "from before backwards," as usually practised. This statement produced a momentary sensation almost of giddiness,—the operation had such a puzzling sound. But on recovering I found that he was alluding to a matter of considerable importance, by raising the question whether in equino-varus the tibial tendons are not sometimes divided when not they, but the tendo Achillis only, should be cut. He is certainly right, but I would venture to put the matter in a rather different way. Many cases in which the foot is in a position of equino-varus, and some even of varus without any apparent equinus, are really cases of pure equinus in disguise. They are cases in which the foot, owing chiefly to the traction of the tendo Achillis upon it when it is inverted—as it often is, in the position of "greatest ease"—has at length become strongly turned in. In all cases of apparent equino-varus, or simple varus, the following examination ought to be, and doubtless is, habitually made by many operators, in order to determine what tendons require division. The surgeon, holding the leg just above the ankle in one hand, with the other hand—having first fully extended the foot on the leg so as to relax the tendo Achillis—ascertains whether the foot can be carried outwards till its long axis corresponds with the long axis of the leg, so that the varus is removed and the foot is brought into a position of simple equinus. If the foot can be brought, without marked resistance, into this position, there is no occasion to divide the tibial tendons. The varus is, in fact, only apparent. But it will now be found that the true deformity is equinus, and that the tendo Achillis is so tight that the foot cannot be brought up to anything like a right angle with the leg. If the tendo Achillis be now divided, it will be found that the foot can be brought into the normal posture, so that the varus as well as the equinus has disappeared. This is true not only in the case of infants, as mentioned by Dr. Marshall, but in that of older patients. Some of the most marked cases are those in which equino-varus has followed essential or infantile paralysis. I will not trespass further on your space than to add that there are, of course, many cases in which both the tibial tendons and the plantar fascia must be divided.

I am, Sirs, faithfully yours,

Bruton-street, W., March, 1888. HOWARD MARSH.

To the Editors of THE LANCET.

SIRS,—Mr. Noble Smith's criticism on Mr. Howard Marsh's paper, published in THE LANCET of Feb. 18th, is an interesting example of what I would propose to call the difference between doctrine and practice. Mr. Smith, in his book on "The Surgery of Deformities," published in 1882, p. 65, says, "The foot and leg are then bandaged so that the position is slightly rectified. ..... This process is repeated again and again until the foot is brought into a straight position with the leg." On p. 69 we read, "Gently and gradually, and day by day, must the foot be drawn outwards until it is in a straight line with the leg." This practice is so totally opposed to what is implied by his statement in your issue of last week—viz., "As I have practised the 'immediate method' *for the last seven or eight years*, I am able to form an opinion upon its merits,"—that I cannot refrain from noticing it. Nor, as far as my memory serves me, did Mr. Smith advocate this line of practice so late as March, 1885, in the discussion on Tarsectomy, at the Medico-Chirurgical Society.

Mr. Marsh's paper appeared to me a very useful and suggestive contribution, and as coming from a surgeon having every-day experience of the subject under discussion. Though one who both preaches and practises immediate rectification in these cases, I feel that Mr. Marsh's description is better than Mr. Smith's, as being truer to nature. Mr. Marsh applies three plaster dressings, gaining at each application a certain amount of rectification. Unless Mr. Smith at once cuts several tendons (a practice he entirely discountenanced at the Medico-Chirurgical Society), and in severe cases some of the tarsal ligaments also, I cannot accept immediate rectification as possible on anatomical grounds, backed by a considerable clinical experience.

After having practised multiple tenotomy and syndesmotomy (division of ligaments) for a long period with nothing but the most satisfactory results, in consequence of much discussion with friends and colleagues I determined to test the subject experimentally, and for this purpose enlisted the assistance of Mr. Horsley at the Brown Institution. We demonstrated as the result of many experiments that union takes place just as rapidly and just as certainly after a wide separation of the extremities of cut tendons and ligaments as when the separation is made gradually.

I am, Sirs, yours faithfully,

Feb. 27th, 1888. R. W. PARKER.

[1] In the notes you published on Feb. 18th, I referred to an instance of equino-varus in which the tibial tendons and the tendo Achillis had been divided, but which had relapsed. This statement led Dr. Marshall to think that I had myself divided the tendons in the first place. I had, however, not seen the child till after the relapse had occurred.

REGINA *v.* HITCHENS.

To the Editors of THE LANCET.

SIRS,—In this case, to which you called attention in a leading article last week, I think the executive is very much to blame. When the Home Secretary had the opinion of two medical men upon the mental condition of the prisoner, he might, under the second section of the Criminal Lunatics Act, 1884 (47 and 48 Vict., Chap. 64), have ordered the prisoner to be confined under treatment in an asylum, instead of exposing him to all the worry and excitement of a public trial. Or, if he still considered it a case where the public good demanded a trial by jury, surely it was his duty to produce for the consideration of the jury every scrap of evidence bearing on the case of which he had a knowledge. It is, indeed, a new experience to find the Crown in a capital case suppressing evidence of its own finding because such evidence happens to favour the prisoner. The present executive has undoubtedly had great experience in getting up Crown prosecutions, but many will think that what might be called sharp practice is rather out of place when a poor insane, epileptic, would-be suicide, born in a lunatic asylum of an insane mother, is being tried for his life.

As to Mr. Justice Field's use of the old yardstick, "Knowledge of right and wrong," in the measurement of the responsibility of the insane, little can be said that has not been said already; but I would give the following case as bearing on the point, and likely to make an interesting study for the learned judge. A man stabbed his brother two years ago and was sent to prison, the act not being recognised as the outcome of mental disease. When under observation in gaol it was soon seen that the man was mad, and he was sent to an asylum. This man is, to the casual observer, a sensible, clear-headed man, but he has several delusions—that his food is poisoned, that the doctor takes away his appetite, that he will get out of the asylum within six weeks by his brother (whom he stabbed) having a question asked in Parliament, that they put a strange liquor in his tea to make his head ache, &c. Ten days ago this man told an attendant that he intended knocking my brains out with a chair on the first opportunity. The attendant remonstrated with him, told him men were punished for such acts, and that it was wrong even to talk of such things. The patient answered that he was quite aware it was wrong to threaten the lives of people, and that men were hanged for murder. "But," he continued calmly, "you can't hang a madman. The worst they could do to me would be to send me to Broadmoor, and from all I have heard it is a better place than this." On the following day I had a long conversation with the patient, when he reiterated his statement, and insisted on the soundness of his argument as to the impossibility of hanging him for murder. This man is insane—insane to the tips of his toes,—yet he is able to reason logically and coherently as to what would be the outcome of any overt act on his part. He would not tell me the reason of his desire to kill me. He may have thought that I "put stuff in his tea to make his head ache," or he may

have had an order from Heaven on the subject; but that matters not—he is insane; the desire is the product of a diseased mind, and he is no more responsible for this disordered cerebration than is the epileptic who falls down convulsed in the street responsible for creating a disturbance and obstructing the thoroughfare.

The "opinion of the judges" still remains the letter of the law in England; but the spirit of the law, as displayed in the utterances of our most liberal-minded and enlightened judges, shows a considerable advance. It may truly be said that "the letter killeth, but the spirit giveth life."

I am, Sirs, yours faithfully,

S. A. K. STRAHAN, M.D.,
Barrister-at-Law.

March 5th, 1888.

"THE RADICAL CURE OF HYDROCELE BY EXCISION."

To the Editors of THE LANCET.

SIRS,—From the report of the discussion which followed Mr. Henry Morris's paper on the Radical Cure of Hydrocele at the Medico-Chirurgical Society last week it would appear that the treatment by excision of the tunica vaginalis has not as yet become very generally adopted. Having now performed this operation in five cases, I should like to say a word or two in favour of it, for in my hands it has been attended by the most satisfactory results. Four of the cases have already been recorded in THE LANCET (September 10th, 1887), along with some remarks on the way in which the operation should be carried out. At the present time, three of the patients are still free from any evidence of recurrence of the hydrocele, and the fourth also was when last seen some months after the operation. The fifth case recently under my care was one of suppuration of a hydrocele after tapping, when the sac wall was in a very thickened condition. From a comparison of the results in these cases with those obtained in several others treated by injection and incision, I have come to the conclusion that in cases of hydrocele, especially when the tumour has been frequently tapped and the tunica vaginalis has become somewhat thickened, the excision method is by far the most certain means of bringing about a radical cure.—I am, Sirs, yours faithfully,

F. A. SOUTHAM, F.R.C.S.
Asst.-Surgeon to the Manchester Royal Infirmary.

Manchester, March 6th, 1888.

THE CHIAN TURPENTINE TREATMENT OF CANCER.

To the Editors of THE LANCET.

SIRS,—In my letter on the above subject in THE LANCET of Dec. 17th I mentioned that I had then under treatment by Chian turpentine a case of uterine cancer, and that in due course I would report the result. I regret to say that the issue has been a fatal one. The turpentine treatment was commenced at the period when the indurated cervix was beginning to break down, and was maintained up to a fortnight before death, when, owing to the great and continuous nausea produced, it was discontinued. Whilst the drug had no effect whatever in arresting the progress of the disease, the ulcerative process steadily progressing, and converting the cervix into an irregular, excavated chasm, it seemed to act beneficially in two respects. The discharge, never at any time great, was lessened; and the pain, which before taking the turpentine even increasingly large doses of opiates could not make bearable, was, with the exception of a short period before death, markedly diminished. I am, Sirs, yours truly,

J. KING KERR, M.D.

Leytonstone, Feb. 27th, 1888.

SMALL-POX ISOLATION NEAR BRISTOL.

To the Editors of THE LANCET.

SIRS,—In your last issue you make a statement on the authority of a member of the Bristol Sanitary Authority that small-pox is extending and crossing the border into Bristol. This is misleading and contrary to the facts. In Stapleton sanitary district there are unfortunately two workhouses to which are attached small-pox hospitals. One of these workhouses is solely for Bristol; the other is for the use of 111,264 of the Bristol population, as well as for that of some neighbouring districts. Practically, then, Stapleton is the dumping ground for the sickness of Bristol. There was no small-pox in this district till it was brought from Bristol to one of the above workhouses, and thence it spread chiefly in the neighbourhood of the hospital, as is shown by a chart which I sent to the Local Government Board. In the same way the medical officer for St. George's thinks it arose in his district. Horfield, I understand, has only had two cases, and they were clearly traced to Bristol. As to the joint hospital, the matter fell through because the site selected was in the Stapleton district; and I think the objection was reasonable considering we have already two foci of infection. Our sanitary committee are taking the necessary steps to provide an infectious diseases hospital. It is now six weeks since the last case appeared in this district, and, with the exception of that case, all the others who were willing were properly isolated either in their own houses or in the hospital of the union, with the guardians of which we arranged for the reception of paying patients.

I am, Sirs, yours truly,

WILLIAM BROWN,
Medical Officer of Health.

Fishponds, March 5th, 1888.

*** We can quite understand that the facts are as reported by Dr. Wm. Brown. For a long time past it has been evident that small-pox was being disseminated by reason of the objectionable practice of using workhouse buildings as small-pox hospitals. The difficulty of ascertaining the true facts has been due to the hospital being connected with a workhouse, and for that reason being subjected to no proper medical supervision by the central authority.—ED. L.

LIVERPOOL.

(From our own Correspondent.)

THE WINTER ASSIZES.

MR. JUSTICE GRANTHAM has been presiding in the Crown Court since the 18th ult. Among other prisoners brought before him was a Greek, a fireman on board an English vessel, charged with stabbing another Greek, who was also one of the crew. The latter would appear to have been a big, powerful fellow, and a great "bully," the prisoner, a small and comparatively weak man, being a frequent victim of his violence. On Jan. 31st, when within six days' sail of Liverpool, the deceased assaulted the prisoner with a backhanded stroke peculiar to Greek sailors. The prisoner, who was breakfasting at the time, stabbed the deceased on the buttock and front of the thigh, selecting these regions as being least dangerous. The deceased died from hæmorrhage seven hours afterwards, and was buried at sea. His clothes were produced, and cuts were visible on the front of the thigh and on that part which would cover the buttock. The knife was also produced, and had stains, apparently of blood, on the blade. The jury acquitted the prisoner. Another prisoner, a seaman, was tried and sentenced to eighteen months' imprisonent with hard labour for stabbing the second mate in two places without any provocation.

A UNIQUE CASE.

Many cases of pregnancy after successful ovariotomy are on record, but such a fortunate sequence in a case where, before operation, the menopause had apparently been established for years, is not on record. The following is, however, such a case. The patient, a lady, gave birth to her last child in July, 1882, she being then thirty-five years of age. She did not nurse this child. Shortly after, menstruation became irregular, and finally ceased towards the end of 1884, when she consulted Dr. Burton, surgeon to the Hospital for Women, who diagnosed a small ovarian tumour. No operation was then recommended, as the tumour was small and freely movable; so nothing was done beyond keeping the patient under observation until February, 1887, when the removal of the tumour was considered advisable. The operation was therefore performed by Dr. Burton on the 18th of that month, when a small tumour, which subsequently proved to be a sarcoma of the right ovary, was removed. After this had been done the left ovary was examined. It was found to be small, ivory white, and indurated, and no suspicion existed in the minds of those who were present that it contained any more ova to mature. It was then returned. Exactly a month after the operation—viz.,

March 10th—the patient menstruated, for the first time for nearly three years, and continued to do so regularly on the 18th of each month until August, when she ceased, and symptoms of pregnancy soon after made their appearance. The pregnancy was verified about the end of the fifth month, and has, up to the present, run a perfectly normal course, the patient being in most excellent health.

Liverpool, March 7th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE CHILDREN'S HOSPITAL.

THE annual meeting of the Newcastle Hospital for Sick Children was held last week. The Mayor presided, and it was stated that the work done during the past year was of the most useful character, the number of new cases treated being: in-patients, 137; out-patients, 2311; the latter involving no less than 6173 attendances. The total cost per head for four weeks (this being the duration of an in-patient's letter) has been £2 9*s.* 8¾*d.* This has been an increase on previous years; but as all costs have been included, the increase is due to necessary building repairs. Allusion was made to the progress of the new building in the suburbs, named, in reference to the munificence of one of our citizens, the "Fleming Memorial Hospital."

NEWCASTLE ROYAL INFIRMARY.

The workmen of the firm of Lord Armstrong and Mitchell have contributed over £600 during the past year to the funds of the Royal Infirmary, and as each £10 per annum, by the new rules, qualifies for one governor, this important firm—indeed, it might be called "arsenal"—will send no less than sixty-six governors to the infirmary. It is pleasant to see the best classes of our artisans taking an intelligent interest in an institution from which they have derived so much benefit.

SUNDERLAND.

At a meeting of the Victoria Hall Calamity Fund, held at Sunderland on Monday, a sub-committee was formed to take steps to have the statue now ready in the sculptor's studio set up in the porch of the Winter Garden. At the same meeting the General Committee voted a sum of £50 to the Sunderland Infirmary for the purpose of sending children to convalescent homes, and, further, a sum of £25 to the Children's Hospital. Although these sums are out of the interest of this fund, and are voted for this year only, they will in all probability be continued.

DURHAM.

A letter has been received from the Local Government Board with reference to the reduction of the salary of the medical officer of the Durham Rural Sanitary Authority from £150 to £100. The Board request to be furnished with the exact reasons for the reduction, and point out that the appointment at the reduced salary was premature, having been made on terms not approved by the Board. In reply to this the Local Sanitary Authority has agreed to furnish the Board with a census of the district, which it is expected will show a decrease of population. Mr. Blackett, who is at present Mayor of Durham, is the medical officer.

INFECTIOUS DISEASES IN THE NORTH.

In Newcastle during the past fortnight, only twenty-six cases of infectious diseases have been reported by practitioners to the medical officer of health, Mr. H. E. Armstrong. This gentleman has made an elaborate and exhaustive report in reference to the late outbreak of scarlet fever in the Jesmond district of the city. The milk supply was fully investigated, but he states that he has been unable to trace its connexion in any way with the outbreak. There has been a rather serious outbreak of measles at Tynemouth, and some of the schools are closed in consequence. The presence of small-pox in some parts of Yorkshire and Lancashire has caused no little alarm in adjoining counties, but so far there has been no outbreak, although we hear of isolated cases—one at Seaham Harbour, co. Durham. The case has evidently been imported from Spain, as the vessel sailed direct from Bilbao, where the disease is prevalent, and the patient became ill on the voyage. Another case, which has proved fatal at Carlisle, has been imported from Manchester.

NEEDLES IN A WOMAN'S BODY.

At intervals during the last few months, twenty needles, mostly about an inch and a half in length, have been extracted from the body of a woman in the Guisborough (North Yorkshire) Workhouse. She suffers from epileptic fits, and she states that some years ago she had a severe illness, and had mustard poultices placed all over her body, which were fastened tightly round with needles, and she thinks that a quantity must then have penetrated her body.

Newcastle-on-Tyne, March 6th.

EDINBURGH.

(From our own Correspondent.)

ROYAL MEDICAL SOCIETY.

THE annual banquet of the Royal Medical Society, marking the close of the 154th year of its existence, was held on March 1st, when a large and representative gathering assembled to do honour to the occasion. The chair was occupied by Dr. W. A. Turner, the senior President for the year, on whose right sat Dr. Lauder Brunton of London, the guest of the evening. After the usual loyal and patriotic toasts, which were warmly responded to, Dr. Brunton proposed the toast of the "Royal Medical Society," and stated that precisely twenty-one years ago he had occupied the post so ably filled by the senior President on this occasion. This naturally led to an interesting comparison which he established between the Edinburgh of a generation ago and the Edinburgh of to-day. In speaking of the great development that has occurred in the school, he referred to several of the teachers and thinkers whose work has done much to spread its great reputation, and specially commented on the work of Keith in ovariotomy, Lister in surgery, and that of Fraser and Crum Brown in regard to antipyretics. Turning now to consider the Royal Medical Society, he showed how it was that this institution, influencing the ripening minds of senior students of medicine, possessed so great a power of implanting originality of thought, just as it also cultivated ease and clearness of exposition. In both respects he expressed his own great indebtedness to the Society. He hoped the leading men of the school in the present day would likewise keep in mind their indebtedness to the Society, and would do their utmost to prevent any encroachment on its useful functions. In responding to the toast, the senior President was able to give a very satisfactory statement of the present condition of the Society. About 100 ordinary members are on the roll this session, and of these about thirty or forty take an active part in the public business of the Society. Financially, the Society is in a flourishing condition, and its large library is increasing, and is carefully preserved. A number of other toasts followed, interspersed with quasi-medical and professional songs, for which Edinburgh has a deservedly high reputation; and at the close, when "Floreat res Medica" was duly honoured, according to ancient custom, it was generally felt that never had the anniversary dinner been more enjoyable or more distinguished than on the present occasion.

ROYAL EDINBURGH ASYLUM.

The annual meeting of the subscribers to this institution was held last week, when, in addition to the usual business, a very interesting report was submitted by Dr. Clouston, physician superintendent of the asylum. During 1887 365 patients have been admitted and 282 discharged, in all 1158 having been under treatment during the year. An important addition is about to be made to the establishment in the shape of a new department expressly built for high-class patients, and to be added to the fine old mansion house of Craig Hall, once the residence of John Hill Burton, which has been in the hands of the managers for some years. In his report Dr. Clouston shows how marked has been the effect of an improved system of nursing and of recent reconstruction of premises and sanitary improvements in reducing the death-rate of the institution. The report has created great satisfaction amongst those directly interested in the welfare of the asylum.

Edinburgh, March 7th.

DUBLIN.

(From our own Correspondent.)

APPLICATION FOR AN INJUNCTION BY THE COLLEGE OF PHYSICIANS AGAINST THE APOTHECARIES' HALL AND THE ROYAL COLLEGE OF SURGEONS.

THIS lawsuit terminated on Saturday, and the College of Physicians has been beaten badly, inasmuch as the Vice-Chancellor delivered judgment in favour of the defendants, dismissing the action with costs. The plaintiffs sought for a decree declaring that the Apothecaries' Hall are not entitled to hold a qualifying examination under the Medical Act, 1886, or to grant a diploma in respect of medicine within the meaning of that Act; and also that the Apothecaries' Hall and the College of Surgeons are not entitled to enter into a combination for the purpose of holding a qualifying examination under the Act. Counsel argued on behalf of their respective clients, and the Vice-Chancellor, in giving judgment, said that the case turned on a narrow point of law on the true construction of the Acts of 1858 and 1886. The question in the case was whether the College of Physicians were now entitled to an injunction restraining the Apothecaries' Hall and the College of Surgeons from combining to grant a diploma in respect of medicine, and also whether those bodies were entitled to hold such examinations as would entitle persons passing such examination to be on the Medical Register. That question arose on the third section of the Act of 1886, the main object of which was to amend the Act of 1858, which he supposed Parliament considered did not sufficiently guard the rights of persons practising as medical practitioners, and the Act imposed the necessity of persons to pass a qualifying examination in medicine, surgery, and midwifery, before they could be placed on the Register. The Apothecaries' Hall admitted that they were not entitled to grant a diploma in respect of surgery, but it claimed the right to grant a diploma in respect of medicine, and therefore it proceeded to enter into an arrangement with the College of Surgeons so that they might be able to supply what was wanted. The College of Physicians insisted that such a combination was not legal, for they denied the right of the Apothecaries' Hall to grant a diploma in respect of medicine. Under the Act of 1858 those who were entitled to practise in medicine and surgery were recognised, and under that Act the Council of Medical Education was appointed, and certain bodies formed the constituency by which that Council was elected. The Apothecaries' Hall in Ireland and the Apothecaries' Society in London were coördinate with the other bodies, including the Colleges of Physicians and Surgeons in Ireland and Scotland, and the Universities in electing to that Council licentiates of the Apothecaries' Hall were entitled to be registered under the fifteenth section. The Vice-Chancellor next alluded to the curriculum for the examination at the Apothecaries' Hall, and said that, the licentiate of the Hall having been placed on the Register, he found nothing to restrain his rights. The only thing he had to consider was whether he had got the qualification from a body qualified to give him a right to be placed on the Medical Register; but he had a clear answer to that in the Act of Parliament. A great portion of the arguments before him was addressed to the question whether it was a wise thing on the part of the Legislature to have included the Apothecaries' Hall in Ireland in the list of qualifying bodies. It was said that the nature of their profession was inferior, and that it was a great error for the Legislature to put them on the Register. He was prepared to dissent from all parts of the proposition. He was satisfied on the arguments in the case that the apothecary was something very much beyond a mere chemist or druggist or compounder of medicine, and he would hold, in accordance with statutory law and legal decisions both in England and Ireland, that as to the powers given to apothecaries in respect of attendance at goals, lunatic asylums, and other public institutions, they were recognised as capable and lawful practitioners in respect of medicine. In addition to that, the qualification conferred by the Apothecaries' Hall entitled its licentiates to be placed on the Medical Register in 1858, and they had since been placed on a very different footing. The Vice-Chancellor, having referred to the course of education which was required to pass the Apothecaries' Hall, said that on the grounds he had stated the case of the plaintiffs could not be sustained, and he should dismiss the information, with costs. The trial lasted four days, a heavy bar was engaged, and the costs must be something considerable. It must also have a serious effect on the resources of the College of Physicians, inasmuch as a large number of candidates will now enter for the Conjoint Scheme of the College of Surgeons and the Apothecaries' Hall, who otherwise must have gone to the College of Physicians.

MEDICAL COMMISSIONER, LOCAL GOVERNMENT BOARD.

There are numerous candidates for the vacancy caused by the death of Dr. King, the appointment being a lucrative one.

March 6th.

BELFAST.

(From our own Correspondent.)

ABDOMINAL SURGERY.

THE last meeting of the Ulster Medical Society (Feb. 29th) was devoted to the subject of abdominal surgery. Professor Sinclair showed a very unique and successful case of enterectomy. The patient, from whom he had removed three inches of the jejunum for artificial anus, the result of a strangulated hernia, was present. Dr. Sinclair also read notes of a successful case of double ovariotomy performed at the Ulster Hospital. Dr. Mackenzie read notes of a case of ovariotomy performed at the Hospital for Sick Children. His patient, a child aged eight years and a half, made a complete recovery. Dr. Dempsey gave details of two successful ovariotomies which he had performed at the Mater Infirmorum Hospital. Dr. Sinclair gave an account of three successful cases of ovariotomy performed at the Royal Hospital by Dr. Wheeler, who was unable to be present. Dr. John W. Byers read notes of three ovariotomies which he had performed in the gynæcological wards of the Royal Hospital. Of these two were successful, but the third, which turned out to be a putrid adherent suppurating cyst, the pedicle of which had, as a result of twisting, become torn through, ended fatally. The patient was, at the time of operation, suffering from acute peritonitis. After these communications had been brought before the members of the Society, a very interesting discussion followed. This plan, adopted by the Society, of devoting evenings to special subjects has given satisfaction, and has tended to make the meetings more interesting.

BELFAST ROYAL HOSPITAL.

At the quarterly meeting of the subscribers, held on Feb. 27th, it was reported that during the past three months 560 patients were treated in hospital (325 surgical and 235 medical.) During the same period there were 2670 out-patients. The balance against the hospital at the close of the financial year was £1450 10s.; at the end of the quarter just closed it was £820; so that the sum of £630 has been wiped off. The condition of the hospital throughout all its departments is reported to be thoroughly healthy, and its useful work goes on steadily and satisfactorily. Mr. Green, who was present, drew the attention of the Board of Management to the fact that some cases sent to the Consumption Throne Hospital had recovered, and said he believed the conditions under which the money was given for the establishment of this department were that only hopeless cases should be admitted. He, as a contributor, never thought of patients being taken there who were expected to recover. A member of the Board of Management pointed out that in no written memorandum, deed, or document was anything said to the effect that the cases admitted to the Consumption Hospital shall be hopeless cases; and if in some cases the disease was arrested when it seemed to be hopeless, was it not a matter for rejoicing? Cases beyond the first stage of phthisis are not admitted into the Royal Hospital, and it is most unfortunate that there is not more special accommodation for such patients in Belfast.

Belfast, March 7th.

AT the annual meeting in connexion with the Bradford Joint Hospital Fund on the 1st inst., it was reported that the receipts had amounted to £4500, and the expenses to £4497.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council of the College, held on Thursday, March 8th inst., the minutes of the ordinary meeting of the 9th of February were confirmed.

A unanimous resolution of condolence with the family of the late Mr. T. B. Curling, F.R.S., past President, past member of Council, and past member of the Court of Examiners of the College, was adopted.

The seventh report, dated the 2nd of March, 1888, on the extension of the College premises—namely, that, in addition to the works in connexion with the extension of the College premises already sanctioned by the Council, a further sum of £692 11*s.* be expended in building, in accordance with the plan submitted by Mr. Salter, a corridor and lavatories behind the theatre, and a staircase communicating with the new portion of the Library and the proposed corridor, in lieu of the iron staircase already sanctioned by the Council, and in providing a hot-water supply for the lavatories—was adopted and entered on the Minutes.

The Council approved of the conditions on which Fellows and Members of the College might be allowed to make use of the new ward-rooms at the College.

The election of a Finance Committee was then proceeded with, and the President, the Vice-Presidents, the Chairmen of the Museum, Library, and General Purposes Committees, and Messrs. Hill, Sibley, and Willett, were appointed.

The sum of £50 was voted towards the building of a Mission Church in the Seven Dials.

A letter of the 16th ult. from Mr. Wilde, the legal adviser of the College, was read, stating that the authorities at Somerset House have decided that the College diplomas are not liable to stamp duty.

A letter of the 13th ult. was read from the Clerk to the Privy Council, forwarding, by direction of the Lord President, for the information of the College, a copy of a letter from the French Ambassador at this Court, announcing that a Congress of Surgeons will take place in Paris from the 12th to 17th of March next.

A letter was read, dated the 29th ult., from Mr. Peel, transmitting, by direction of the Lord President of the Council, to be laid before the Council of the College, a copy of a "rejoinder" which the Committee of the Association of Fellows have forwarded to his Lordship. After the consideration of this rejoinder, the Council resolved that a reply be sent, to the effect that the Council request his Lordship to grant them an interview, to give him any further information which he may require with respect to the rejoinder.

The following motion by Mr. Willett, which was seconded by Mr. Cadge—viz., "That a committee be appointed to consider and report to the Council on the form of the report of the Council to the annual meeting of Fellows and Members of the College"—was adopted, and the President and Vice-Presidents, and Messrs. Cadge, Marshall, and Willett, were appointed to act on that committee.

It was proposed by Mr. Sibley: "That, in view of the appointment by the Council of a professional auditor to annually audit the accounts of the College, a committee of auditors is no longer necessary, and that Section 21 of the standing rules relating to such committee be accordingly abrogated and annulled." This was seconded by Mr. T. Smith, and carried.

THE SERVICES.

Surgeon-Major T. Faris, M.B., has been appointed Staff Officer of the Medical Staff Corps at Headquarters, in succession to Surgeon-Major W. Johnston, M.D., whose period of service has expired.

It is understood that Surgeon-General J. B. C. Reade, C.B., will be appointed Head of the Medical Branch, A.M.D., in room of Surgeon-General W. A. Mackinnon, C.B., who has proceeded to Gibraltar.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General John By Cole Reade, C.B., to be Surgeon-General (ranking as Major-General), vice T. W. Fox, M.B., granted retired pay (dated Feb. 15th, 1888). The undermentioned Surgeons-Major to be Brigade Surgeons (ranking as Lieutenant-Colonels): Frederick Beaufort Scott, M.D., C.M.G., vice W. B. Ramsbotham, M.D., retired (dated Jan. 23rd, 1888). Thomas Francis O'Dwyer, M.D., vice F. P. Staples, retired (dated Feb. 1st, 1888).

INDIA OFFICE.—The Queen has also approved of the following admissions to Her Majesty's Indian Medical Service:—TO BE SURGEONS (dated March 31st, 1887). *Bengal:* William Henry Wilson Elliot, James Murray, William Ronaldson Clark, George Frederick William Braide, Robert John Marks, Charles Edward Sunder, Malcolm Albert Ker, Albert Robert Jolliffe, Andrew Buchanan, Percy Oswald Ward Hailey, Lewis Gordon Fischer, William Vost, John Garvie, Chas. Edwin Lloyd Gilbert, Herbert William George Macleod, Courtenay Clarke Manifold, and Gerard Beatty Irvine.—*Madras:* William George McEvoy, Frederick James Crawford, M.D., David Simpson, Robert Robertson, Thomas Charles Moore, Arther Howard Jacob, and William Henry Karney.—*Bombay:* Charles Hardwick Louw Meyer, Letterstedt Frederick Childe, Herbert Herbert, and Thomas David Collis Barry. TO BE SURGEONS (dated Oct. 1st, 1887):—*Bengal:* Alfred Ernest Roberts, David Macdonald Davidson, Frederic Pinsent Maynard, John Charles Lamont, Arthur Holbrook Nott, Albert Coleman, William Westropp White, M.D., Daniel Thomas Lane, M.D., Robert Charles Macwatt, William Henry Edward Woodwright, Walter James Buchanan, Joseph Kinneard Close, M.D., John Maurice Macnamara, M.D., and Henry Moore Brabazon, M.D.—*Madras:* William Henry Martyn Ingham, Frederick Joseph Dewes, Joseph Orphino Pinto, Percy Charles Hutchison Strickland, and Thomas William Stewart.—*Bombay:* Joshua Holt, Thomas Howard Griffith, John Lloyd Thomas Jones, and William Ernest Jennings.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon William George Ridings has been placed on the Retired List, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets (dated Feb. 25th, 1888). Staff Surgeon Thomas Canning Hickey, M.B., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated Feb. 28th, 1888). Staff Surgeon Anthony Gorham has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated Feb. 21st, 1888).

The following appointments have been made:—Staff Surgeon Charles L. Vasey, to the *Curaçoa;* Staff Surgeon John Dudley, to the *Brisk;* Fleet Surgeon J. Trimble, to the Royal Marine Artillery Division at Eastney (dated Feb. 29th); Surgeon G. R. D. Charlton, to Sheerness Dockyard; Surgeon J. W. O. Underhill, to the *Pembroke*, additional (dated March 5th); Surgeon Jerom Barry, to the *Curaçoa;* Surgeon Daniel J. P. M'Nabb, to the *Banterer;* and Thomas Fuller, M.D., to be Surgeon and Agent at Shoreham and Fishergate (dated March 2nd).

RIFLE VOLUNTEERS.—5th Volunteer Battalion, Princess Louise's (Argyll and Sutherland Highlanders): Acting Surgeon James Hunter is appointed Lieutenant (dated March 3rd, 1888).—21st Middlesex (the Finsbury): Phineas Pitts Langford, Gent., to be Acting Surgeon (dated March 3rd, 1888).

THE VOLUNTEER MEDICAL STAFF CORPS.—The London Division: Surgeon Commandant James Cantlie, M.B., resigns his commission (dated March 3rd, 1888).

Obituary.

JOHN STUART HUTTON, M.B., &c.

JOHN STUART HUTTON, M.B. Lond., L.R.C.P., M.R.C.S., L.S.A., the only son of Mr. Walter S. Hutton, C.E., of Forest-hill, was born at Harrogate, in the year 1863. In January, 1877, he entered Sir A. Judd's School, Tonbridge, Kent, where he obtained several prizes, being in the sixth form, and head of the school in Science when he left at Midsummer, 1880; he had always shown a great interest in scientific subjects, especially geology and chemistry. In October, 1880, he joined the Medical School of St. Thomas's Hospital, taking the Entrance Science Scholarship. During his hospital career he always obtained a high place at the sessional examinations, three times securing prizes; and at the end of his fourth winter session obtained marks qualifying for the Mead Medal in Medicine, and the Treasurer's Gold Medal. In 1886 he obtained the Murchison Scholarship

in Clinical Medicine. At the hospital he held the post of house physician, resident accoucheur, and house surgeon, and during his period of office distinguished himself by the conscientiousness and ability with which he discharged his duties. In October, 1886, he graduated as Bachelor of Medicine at London University, taking honours in medicine. In July, 1887, he entered the Colonial Service, and was appointed to the Colonial Hospital at Georgetown, Demerara, British Guiana, where he soon won the respect and friendship of his colleagues. In January of this year, however, various reasons, including ill-health, had decided him to quit the colony, and his preparations had been made to leave for home, when, owing to the illness of his friend and colleague, Dr. Rannie, whom he nursed, he consented to remain till further help should arrive for his already overworked colleague. Dr. Rannie had almost recovered from an attack of what was probably yellow fever, when tetanus developed and rapidly proved fatal. Mr. Hutton's resignation was accepted on Jan. 31st, and he had made arrangements for leaving in a few days, but meanwhile went for a visit up country with a party of visitors, including Lord Porchester. There, however, the illness attacked him which he appears to have expected, for letters were afterwards found which seemed to indicate that he apprehended that his devotion to duty and attention to his colleague might result in the worst consequences to himself, yet he did not shirk his duty. Whilst on this trip up country yellow fever of a severe type attacked him, and he died on Feb. 6th, to the deep regret of a large circle of friends, by whom he will always be affectionately remembered.

Thus early closed the career of one who had the esteem and respect of all his medical colleagues and the confidence of all those placed under his charge; and thus the hopes and anticipations of his teachers for a brilliant career were disappointed, and the world lost one who seemed destined for a life of usefulness and honour.

AUGUSTO MICHELACCI.

ITALY has lost her leading dermatologist in this accomplished physician, who died in Florence on the evening of Monday, the 13th ult., in his sixty-fourth year.

Dr. Michelacci's early proficiency and steadily enhanced reputation led to his appointment, when comparatively young in the profession, to the post of Commissioner of Santa Maria Nuova and of the United Hospitals of the Tuscan capital, in which capacity he served the interests alike of the public and of his colleagues with such ability, tact, and geniality, that on his retirement, after many years' work, he carried with him the gratitude of the whole community. His public spirit and capacity for affairs, especially in everything that affected the physical well-being of his fellow-citizens, found congenial scope in the Florentine Town Council, whose deliberations he always maintained at a high pitch of philanthropy and practical efficiency. This honourable distinction he earned during long years of domestic affliction, by which his family was gradually cut down from a goodly number to one survivor—a daughter, who shared with his pupils the devotion and affection of his declining years. To the last his chair of Dermatology in the Istituto Superiore was his chief solace and intellectual resource. The mere recital of the posts he held will attest the confidence reposed in him by the profession and the public. In 1849 he was assistant physician of the Royal Hospital of Santa Maria Nuova. In 1851 he was superintendent of the female wards in that extensive institution. In 1852 he was surgeon to the Boniface and Santa Lucia Infirmary. In 1857 he was assistant physician in the "skin wards" attached to the Istituto Superiore. In 1858 he became member of the Collegio Medico Fiorentino. In 1859 he was appointed medical director of the Boniface and Santa Lucia Hospital; and in the same year, we believe, he succeeded the celebrated Pietro Cipriani (*vide* THE LANCET, April 16th, 1887) in the Professorship of Cutaneous Maladies in the Royal Institute of Superior Studies—the post which he held with brilliant success till the day of his death. In all of these positions, including that already mentioned of Commissioner of the United Hospitals, he never failed to inspire the respect and to conciliate the goodwill of everyone with whom he came in contact. In addition to these local appointments, he held numerous honorary posts in Italy and in the other European States, such as the membership of the Society of Medical and Natural Sciences of Paris, of the Society of Hygiene in Milan, of the Physio-critical Society of Siena, and of the Veterinary Society of Turin. Many commissions organised under Government included him in their number, and the good service he rendered in connexion with them earned for him the decorations of the Order of St. Maurice and St. Lazarus, and of that of the Crown of Italy. We may add, in conclusion, that his courtesy to foreign, especially to English and American, colleagues, was in constant keeping with his genial and philanthropic nature.

EDWARD JOHN WRIGHT, M.R.C.S.

IT is with feelings of deep regret that we have to record the death of Mr. Edward J. Wright, who died on Feb. 23rd, at Clapham, at the age of sixty-six, after an illness of some months' duration. Educated at St. Thomas's Hospital, he obtained the diplomas of M.R.C.S. in 1843, and L.S.A. in 1844. For nearly two years after this date he studied on the Continent, but on returning to England he became associated in partnership with the late Mr. Forbes Young at Clapham, where he practised up to his death. His kindness and sympathy won for him the love of all that were brought in contact with him, and he leaves a large circle of professional and private friends to mourn their loss.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations in Surgery and obtained Medical qualifications, were at an ordinary meeting of the Council on the 8th inst. admitted Members of the College:—

Spear, G., L.S.A., Albert-terrace, Moor Park, Preston, Lancs.
Thomas, Charles Ernest, L.S.A., Middlesex Hospital.

The following gentlemen having passed the necessary examinations were at the same meeting admitted Licentiates in Dental Surgery:—

Harris, Douglas Howard, Bedford-square.
Henry, Herbert George, Wellington-square, Hastings.
Lankester, Francis John, M.R.C.S., High-street, Leicester.
Reading, R. Fairfax, M.R.C.S., Hyde Park, Sydney, N.S.W.
Smale, Charles Henry, Oxford-street, Manchester.
Van der Pant, F. H. Morgan, Elm Lawn, Kingston-on-Thames.

THE BRUSSELS M.D.—The name of G. B. Flux, L.S.A., was inadvertently omitted from the list published last week of gentlemen who had obtained the above degree.

VACCINATION GRANT.—Mr. Philip Edward Hill, Crickhowell Union, has received the Government grant (sixth time in succession) for efficient vaccination in his district.

IT has been decided by the Manchester Medical Society to entertain Dr. Cullingworth at a dinner on the 15th inst., and at the same time to present him with a testimonial, previous to his departure for London.

PRESENTATION.—Mr. Jones, of Westleigh, has been presented with a solid silver egg-stand and spoons by the members of the local class in connexion with the St. John Ambulance Association, as a token of their appreciation of his services as instructor.

WATER SUPPLY, MANCHESTER.—It is announced by the Waterworks Committee that, in consequence of the state of the reservoirs, it is necessary to discontinue the supply of water between the hours of 8 P.M. and 5 A.M. until further notice.

CENTENARIAN.—On the 2nd inst. Mrs. Kilham celebrated her centenary at Mexborough. She is partially blind, and has very defective sense of sound, but she eats and sleeps well, and is reported to look quite twenty years younger than she really is.

RECOGNITION OF PAST MEDICAL SERVICES IN CUBA.—The municipality of Havana have erected a marble tablet on the house where Dr. Don Tomás Romay y Chacon was born in 1764, with an inscription laudatory of medical science in general and of Don Romay in particular, making special mention of the fact that it was to him the island of Cuba was indebted for the introduction of vaccination.

LADY ROBERTS'S HOMES IN THE HILLS.—A committee meeting of Lady Roberts's Homes in the Hills for Soldiers' Nurses in India was held under the presidency of Princess Christian, at 37, Wimpole-street, on the 2nd inst. Arrangements were made for developing the organisation with a view of receiving further subscriptions. The amount collected since Jan. 1st, 1888, is £1108, in which sum is included a donation from Her Majesty the Queen of £100.

THE GIFT TO BARNSLEY.—Touching the announcement of this gift in our issue of the 25th ult., the Town Council have accepted the generous offer of Mrs. A. A. Lambert (daughter of the late Mr. Francis Kendray) to give £4000 towards providing a fever hospital for the borough, which is to bear the name of the Kendray Fever Hospital. Mrs. Lambert has made several benefactions to her native town. The £4000 will be at once placed in the hands of trustees and the building forthwith erected.

OPHTHALMIA IN SCHOOLS.—Mr. Sidney Stephenson, M.B., medical officer in charge of the ophthalmic cases in the schools of the parish of Lambeth at Norwood, has been reappointed for a further term of three months. The special arrangements for the treatment of the eye cases in the schools have now existed for fifteen months. The numbers under treatment are now less than they have been since Mr. Stephenson's appointment; no acute cases exist, the infirmary inmates being composed chiefly of chronic and intractable cases of granular lids, which require a long time and much local treatment to effect a cure.

THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION AND MR. MARSHALL.—At a meeting of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, Fleet-street, on Tuesday, March 6th, the case of Mr. Marshall, of Mitcham, who has been called upon to resign his appointment to the Mitcham Schools, for alleged insufficient attendance, was fully discussed, and it was considered by the Council, from the evidence before them, that the charge, if proved, was not of such a nature as to warrant the compulsory resignation of a public servant after thirty-two years' continuous service. The Council, therefore, passed a resolution that their secretary should write to Mr. Marshall, asking him to lay his case before the Local Government Board.

THE PARKES MUSEUM AND THE NATIONAL HEALTH SOCIETY.—A course of five lectures on "Domestic Hygiene" has been jointly arranged by the Council of the Parkes Museum of Hygiene and the National Health Society. Dr. A. J. Schofield will be the lecturer, and the lectures will be delivered at the Parkes Museum, Margaret-street, at 3 P.M. on the following dates: March 14th, 16th, 21st, 23rd, 28th. The subject of the last lecture (March 28th) is "Home Nursing," when demonstrations (clinical) will be given by trained hospital nurses. An examination will be held when the course is completed (after Easter), and H.R.H. the Duchess of Albany has consented to present the certificates to the successful candidates.

UNIVERSITY COLLEGE, LONDON.—The annual general meeting of University College was held at the College on Wednesday, Feb. 29th, Mr. J. Eric Erichsen, F.R.S., President, in the chair. Mr. Erichsen was re-elected president and the following were admitted life-governors of the College: Sir F. Leighton, P.R.A., Professor C. S. Beesley, Professor H. S. Foxwell, Professor D. Oliver, F.R.S., Sir J. N. Douglass, F.R.S., Mr. W. H. Perkin, F.R.S., Ph.D., Mr. H. H. S. Cunynghame, Mr. L. H. Courtney, M.P., and Mr. E. Maunde Thompson, LL.D. The following were elected Fellows of the College: Mr. Walter Ashburner, B.A., Miss Louisa Macdonald, M.A., Miss Alice L. S. Riding, M.A., Mr. J. J. Powell, M.D., Mr. S. Rideal, D.Sc., Mr. R. D. Roberts, D.Sc., and Mr. P. D. Turner, M.D.

LEEDS GENERAL INFIRMARY.—The 120th annual report for the year 1887 states that during the year no fewer than 34,018 persons were treated at the infirmary, besides 510 maternity cases attended to at their own homes, as against 30,607 and 378 respectively in the previous year, an increase of 3543; 220 patients were sent to convalescent homes during the year. The receipts and disbursements for the year were respectively £17,339 0*s.* 11*d.* and £16,513 9*s.* 1*d.* The receipts exhibit a decrease of £556 16*s.* 6*d.*, and but for the large increase in the workpeople's contributions there would have been a considerable deficit. A Jubilee present was made to the infirmary by the working men of Leeds of two thoroughly equipped horse ambulances, at a cost of £328. The new hospital at Cookridge, provided by Mr. John North, will, it is expected, be ready for occupation in May next. The report concludes by urging the necessity of erecting a building on the vacant land, the property of the infirmary, to provide adequate accommodation for the increasing demands upon the institution. This contemplated extension would cost £20,000, and involve a responsibility which the board, in its present financial position, is not prepared to undertake.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—From the annual report of this institution for last year, it appears that during the twelve months the number of in-patients was 1311, as against 1249 in 1886, and of out-patients 6068, as against 5329. The income amounted to £5853, and the expenditure to £6436.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.—The annual general Court of Governors of this institution was held on the 2nd inst., the Lord Mayor, who was accompanied by the Lady Mayoress and attended by the Sheriffs of London and Middlesex, presiding. The report stated that for the past year the income of the hospital had been considerably larger than for the previous year. The statistics of the work done, as compared with the previous year, showed the in-patients, in 1887, to be 459, as against 483 in 1886; out-patients 7045, against 7195; dental cases 280, against 230; and home visits to children 370, as compared with 471. The smaller number of in-patients was caused by the hospital being closed for a short time for sanitary and cleansing purposes. It was decided that a special fund be raised to free the hospital from debt.

MEDICAL EDUCATION AND DEGREES FOR LONDON MEDICAL STUDENTS.

THE following petitions have been forwarded to the Privy Council:—

PETITION OF OWENS COLLEGE.

To the Queen's Most Excellent Majesty in Council.

THE humble petition of the Senate of the Owens College sheweth: That your petitioners have been informed that the Royal College of Physicians of London and the Royal College of Surgeons of England are jointly seeking to obtain a Royal Charter, conferring on the conjoint Colleges the power of granting degrees in Medicine or Surgery. That there is reason to believe that if such power be granted it is proposed that the degree shall be restricted to students educated in whole or in part in the London schools, to the exclusion of those who have completed the whole of the required period of study in a provincial school of medicine, this residential condition being made essential and provided for either by the terms of the Charter or by means of Bye-laws subsequently enacted in pursuance of powers conferred by the Charter. That the conjoint Colleges are national institutions with which the Provincial Schools of Medicine have been closely associated from their foundation, and for whose examinations a very large proportion of provincial students enter. That, while not desiring to express any opinion on the advisability of extending University powers to the conjoint Colleges, your petitioners humbly submit that it will be manifestly unjust to the large and increasing number of students trained in Provincial Medical Schools if they are debarred by a residential qualification—i. e., a requirement compelling them to spend some portion of their period of study in London—from obtaining a degree which it may at any time be in the power of the conjoint Colleges to confer. Your petitioners therefore pray that in the event of a Charter being granted to the Royal Colleges, your Majesty will direct that a clause shall be inserted which shall effectively protect the interest of the provincial students now and in the future. And your petitioners will ever pray, &c.

Signed in the name of the Senate of the Owens College.

——— J. G. GREENWOOD, Principal.

PETITION OF THE LORD BISHOP OF LONDON.

THE humble petition of Frederick, Lord Bishop of London, sheweth That your petitioner, as Bishop of the Diocese of London, is deeply interested in the means of education provided for the inhabitants of his diocese. That there is a very large number of persons therein who could and would profit by an academical education if it were brought within their reach. That most of these persons could neither afford the time nor the money to leave their homes for this purpose. That the highest and best academical education is not supplied at present within the metropolis. That for such education it is essential that the instruction and examination of the students should be parts of one whole, leavened with the same spirit and conducted on the same general lines. That, for instance, it would seriously hurt and lower the work done at Oxford if the examiners were always brought over from Cambridge, and the work done at Cambridge if the examiners were always brought over from Oxford; and still more hurt would be done if each of these Universities not only sent examiners, but prescribed the examinations for the other. That the University of London has chosen an Imperial in preference to a Metropolitan position, and is doing valuable service to a large number of educational institutions and to many solitary students scattered over the whole empire, but that this is not the kind of service required in a Metropolitan University, nor does it provide, nor help to provide, the best and highest kind of academical education. That the two functions—the Imperial and the Metropolitan—cannot usefully be combined. That it is therefore impossible to adapt the University of

London to the needs of the metropolis. That the metropolis, containing over four million people, ought not to be left without the best academical education for the sake of the University of London. That, on the contrary, this vast population is quite sufficient to justify the existence of and to supply materials for two Universities framed on different lines. That, for these reasons, your petitioner earnestly desires the grant of a Charter to a Teaching University for the Metropolis. That your petitioner is aware that a petition has already been presented praying that such a Charter may be granted. That your petitioner prays to be heard in person in support of the same, if such hearing be consistent with usage and practice.

MEDICAL NOTES IN PARLIAMENT.

Vivisection.

IN the House of Lords on the 1st inst., Viscount Sidmouth moved for correspondence between Her Majesty's Secretary of State for the Home Department and the Anti-Vivisection Society in reference to two recent cases in which the law relating to vivisection appeared to have been contravened. He said there were certain conditions annexed to the granting of certificates under the Vivisection Act, to the effect that the experiments should not be performed in public. In consequence of that and other circumstances it was extremely difficult to obtain convictions under the Act. The administration of the Act was placed in the hands of the Home Office. One or two cases had recently occurred which appeared to him and to those for whom he spoke to call for prosecution. In both those cases the Home Office had refused to prosecute on one ground or another, and it was for the correspondence which took place in reference to those two cases that he now moved.—The Marquis of Salisbury said if the noble lord repeated his question it would be answered.

Lunacy Act Amendment Bill.

On the 2nd inst. this Bill was read a second time.

Pharmacy Acts Amendment Bill.

This Bill passed through Committee with the addition of an amendment by the Earl of Milltown, prohibiting the opening of branch shops by chemists unless a duly qualified person is employed in each such establishment.

Compulsory Vaccination.

In the House of Commons on the 1st inst., Mr. Walter M'Laren asked the President of the Local Government Board in reference to the repeated prosecutions of Mr. Charles Hayward by the East Ashford Board of Guardians for not having his two children vaccinated, whether he was aware that the public vaccination officer only attended in the district of Willesborough, where Mr. Hayward lived, once every six months; whether under these circumstances, and, considering Section 12 of the Act of 1867, the vaccination officer was legally entitled to take cognisance of Mr. Hayward's default oftener than once in six months; and whether, as Mr. Hayward was prosecuted thirteen times last year, though the public vaccination office is only open twice a year, he would consider whether the action of the guardians was legal, and would in any case take steps to prevent a recurrence of such prosecutions.—Mr. Ritchie said the public vaccinator attended Willesborough twice a year. They were advised that this did not prevent the officer from taking cognisance of the default of Mr. Hayward more than once in six months. He had no authority to interfere in the action of the guardians in respect to prosecutions in these cases.

Parochial Medical Officers.

On the 2nd inst., Sir W. Foster asked the President of the Local Government Board whether it was the general rule to appoint in county districts parochial medical officers who were resident in the districts; and, if so, why this rule had not been followed in the Waters Upton district of the Wellington Union, in the county of Salop.—Mr. W. Long: As a general rule guardians, when the circumstances admit of it, appoint as district medical officers medical practitioners who are resident in the districts for which they are to act. In cases such as that referred to the appointment is annual, and the guardians in December last, by 15 votes to 3, determined to reappoint the non-resident practitioner, who has held the office for ten years. The guardians state that the duties during the period have been discharged with perfect satisfaction to themselves and to the patients. The officer is daily in the district, and it is a condition of his reappointment that he shall have a surgery in the district, where he is to attend at least two days a week. The only objection which has been made to the appointment is by the unsuccessful candidate, who has been resident in the district about fifteen months. The Board did not consider that the circumstances were such as to preclude their acceding to the wishes of the large majority of the guardians, and they therefore assented to the appointment.

The Pollution of the Thames.

On the 6th inst., in answer to Mr. Dixon-Hartland, Mr. Ritchie said that an hotel is being built on the eyot near Weybridge Ferry. According to the description which accompanied the plans submitted to the sanitary authority in January last all the closets are to be on the earth system and slop water is to be disposed of in the kitchen garden, which, it is stated, will exceed half an acre in extent. He was informed by the Thames Conservators that on the occasion of high floods the eyot is under water in the winter months. The owner is campshedding and repairing it, and they have sold to him material raised by their dredges which has been used for this purpose. The statements in the question as to the communications which have passed between the Chertsey Sanitary Authority, the Thames Conservators, and the Local Government Board, and as to the prosecution of the Chertsey Sanitary Authority for pollution of the river, are, he believed, correct. He had not precise information as to the distance of the intake of the water company from the eyot, but it is at no great distance. The Local Government Board have themselves no power in this matter.

The Metropolitan Board of Works.

In reply to Mr. Kenyon, Mr. Matthews stated that the appointment of the Royal Commission on the Metropolitan Board of Works was now under consideration. The method of dealing with the sewage of the metropolis appeared to him to be outside the scope of the inquiry, which would, however, embrace any alleged irregularities in the financial transactions connected with the works which have been undertaken by the Board.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

ALEXANDER, W., F.R.C.S., has been appointed Honorary Surgeon to the Liverpool Royal Southern Hospital.

BERRY, JAMES, B.S.Lond., F.R.C.S., has been appointed Surgeon to the Alexandra Hospital for Children with Hip Disease, vice Howard Marsh, F.R.C.S., resigned.

BOODLE, ROBERT MAXWELL, M.R.C.S., L.S.A., has been reappointed Surgeon to the Cirencester Cottage Hospital.

BUSWELL, FERRERD RICHARD, L.R.C.P., M.R.C.S., has been appointed House-Physician to the Middlesex Hospital.

CORSHAM, WM. RAYMOND, M.D.Aber., M.R.C.S., has been reappointed Surgeon to the Cirencester Cottage Hospital.

CRIPPS, EDWARD CHAS., L.R.C.P.Lond., M.R.C.S., has been reappointed Surgeon to the Cirencester Cottage Hospital.

DOWNES, H., L.R.C.P. Lond., M.R.C.S., has been appointed Junior Medical Superintendent to the Infirmary of the Parish of St. Pancras.

FOWLER, OLIVER H., M.R.C.S., has been reappointed Surgeon to the Cirencester Cottage Hospital.

GIDDINGS, R. R., M.B., C.M.Ed., M.R.C.S., has been appointed Surgeon to the Staff of the Nottingham Post Office, vice Mr. Worth, deceased.

GOING, J. A., B.A.Cantab., M.R.C.S., L.S.A., has been appointed Assistant Colonial Surgeon to Falkland Island.

HAWKINS, FRANK S., M.R.C.S., L.S.A., has been appointed Medical Officer for the Third District of the Okehampton Union.

HAWKINS, F. S., B.A., M.B., B.S.Oxon., F.R.C.S., has been appointed House-Surgeon to Guy's Hospital.

HEATHERLEY, F., M.B., B.S., F.R.C.S., has been appointed House-Physician to Guy's Hospital.

HOOKER, CHAS. PAGET, L.R.C.P.Ed., L.R.C.S., has been reappointed Surgeon to the Cirencester Cottage Hospital.

JOLLYE, A. DIXON, M.R.C.S. &c., has been appointed Medical Officer to the St. Luke's Home for Sick Women and Children.

JONES, BENJAMIN, M.B., C.M.Ed., has been appointed Medical Officer for the Northern District of the Gower Union.

LANKESTER, FRANK, L.R.C.P.Lond., M.R.C.S., L.D.S.Eng., has been appointed House-Surgeon to the National Dental Hospital, Great Portland-street, W., vice Chas. A. Pattinson, L.D.S.Eng., resigned.

MACKINNON, CHAS., M.A., M.B., C.M.Glas., has been appointed Medical Officer to the Workhouse and South District of the Cirencester Union.

MACKINTOSH, ANGUS, M.D., L.F.P.S. Glas., has been reappointed Medical Officer of Health for the Clay-lane Urban District, Chesterfield.

MARRIOTT, HYDE, M.B., B.Sc.Lond., has been appointed House Physician to University College Hospital.

MOORE, FREDERICK H., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Anstey District of the Barrow-upon-Soar Union.

RHODES, THOS., M.B., C.M.Ed., has been appointed Medical Officer for the Seventh District of the Preston Union.

ROUTH, C. J., M.B., B.S., has been appointed House-Physician to Guy's Hospital.

STEWART, DONALD, M.D., has been appointed Honorary Surgeon to the Nottingham Throat and Ear Hospital.

TAYLOR, ALFRED, L.K.Q.C.P.I., L.F.P.S.Glas., has been reappointed Medical Officer of Health for the Little Lever Local Board.

WALKER, J. E., L.R.C.P.Lond., M.R.C.S., has been appointed Senior Assistant Medical Superintendent to the Infirmary of the Parish of St. Pancras.

WILLIAMS, A. H., M.A., M.B., B.C.Cantab., has been appointed House-Surgeon to Guy's Hospital.

WILLIAMS, FREDERICK M., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Milton Abbott District of the Tavistock Union.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BRITISH SEAMEN'S HOSPITAL, Cronstadt, St. Petersburg.—Resident Medical Officer. Salary commencing at £180 per annum, with furnished rooms, fuel, light, and attendance.

BURTON-ON-TRENT FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Surgeon.—Junior Surgeon and Dispenser.

CITY OF ABERDEEN.—Medical Officer of Health. Salary £300 per annum.

COTON-HILL LUNATIC HOSPITAL, Stafford.—Assistant Medical Officer. Salary £100 per annum, with board and furnished apartments in the hospital.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants.

LIVERPOOL DISPENSARIES.—Two Assistant Surgeons. Salary £80 per annum, with apartments, board, and attendance.

MALE LOCK HOSPITAL.—House-Surgeon. Salary £50 per annum, with board and lodging.

PARISH OF RESOLIS AND DISTRICT, Ross-shire.—Resident Medical Officer. Salary £62 per annum.

PENTRE PIT, Pontypridd.—Resident Medical Man. Salary about £35 per month.

UNIVERSITY OF EDINBURGH.—Additional Examiner in Botany. Salary £75 a year, with an allowance of £10 a year for travelling and other expenses in the case of an Examiner not resident in Edinburgh or the immediate neighbourhood.

WOOLWICH UNION.—Assistant Medical Officer (Resident). Salary £90 per annum, with apartments, rations, and washing.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary £50 a year, with board and lodging.

Births, Marriages, and Deaths.

BIRTHS.

CHRISTISON.—On the 2nd inst., at Canning-street, Liverpool, the wife of David Christison, M.D., of a daughter.

DRYSDALE.—On the 1st inst., at Rue de Fréjus, Cannes, the wife of Alfred Drysdale, M.B.Lond., L.F.P.S.Glas., of a son.

FOWLER.—On the 5th inst., at Bishopsgate Without, the wife of Walter Fowler, M.A., M.B., F.R.C.S., of a son.

WOODS.—On the 27th ult., at Paulton, Somerset, the wife of Frank Woods, L.R.C.P., M.R.C.S., of a son (stillborn).

MARRIAGES.

FULSHAW—DAVIES.—On the 14th ult., at St. Martin's Church, Haverfordwest, William Singleton Fulshaw, L.R.C.P.Ed., to Annie Maud Davies, youngest daughter of Vaughan P. Davies, of Skomer Island, Pembrokeshire.

HILLYER—SMITH.—On the 28th ult., at St. Marylebone Parish Church, William Herbert Hillyer, L.R.C.P., to Helen Edith, only daughter of Major-General Annesley Smith, late Bombay Staff Corps.

DEATHS.

CLARK.—On the 3rd inst., at Park-circus, Ayr, N.B., John Andrew Clark, Surgeon &c., late Bengal Army, and late Younger of Fingask, Inverness-shire.

HURST.—On the 29th ult., at Weston-super-Mare, James Charles Hurst, M.R.C.S., L.S.A., F.L.S., F.Z.S., formerly of Dartford, Kent, in his 92nd year.

MACMILLAN.—On the 6th inst., at his residence, The Elms, Beverley-road, Hull, Angus Macmillan, M.D., aged 56.

MASON.—On the 5th inst., at 20, Belmont, Bath, Mary Anne, wife of Frederick Mason, M.R.C.S.E., &c.

ROBINSON.—On the 2nd inst., at his residence, Winckley-square, Preston, Lancashire, Hugh Robinson, F.R.C.S.

SMYTH.—On the 1st inst., suddenly, at Pelham House, Poole, Hatton Smyth, M.D., aged 40.

STEWARD.—On the 6th inst., at his residence, The Briars, Sandown, I.W., John Burdett Steward, M.D., F.R.C.P., formerly of Southall Park and The Shrubbery, Southall, in the 95th year of his age. Friends will please accept this (the only) intimation. No flowers.

TAAFFE.—On the 3rd inst., at his residence, Old Steine, Brighton, Rickard Patrick Burke Taaffe, M.D., Medical Officer of Health for Brighton, in his 60th year.

WALLER.—On the 1st inst., at Bantony House, Robertsbridge (the residence of her son-in-law, Chas. Hoar, M.B.), Matilda Margaret, widow of Augustus Waller, M.D., F.R.S., aged 73.

WHITWORTH.—On the 25th ult., at Portslade, William Whitworth, L.R.C.P.Lond., M.R.C.S.E., aged 26.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

ANGLO-JEWISH AND VERNACULAR PRESS, Bombay.

A Manual of Comparative Anatomy of the Domesticated Quadrupeds. By N. H. E. Sukhia, L.M. & S. Bombay. 1887. pp. 262.

APPLETON & Co., New York.

A Practical Treatise on Diseases of the Skin. By J. V. Shoemaker, M.D. With Coloured Plates and other Illustrations. 1888. pp. 633.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

Transactions of the Academy of Medicine in Ireland. Vol. V. By Wm. Thomson, M.A., F.R.C.S. 1887. pp. 367.

The Progress of Gestation: A Synopsis of Practical Obstetrics. By Professor Pajot. Translated and edited by R. Milne Murray, M.B., F.R.C.P.Ed. pp. 30.

Human Anatomy and Physiology. Part II. With a Movable Atlas and Superposed Coloured Plates. By Professor G. J. Witkowski, M.D.

BELL, G., & SONS, York-street, Covent-garden.

A Manual of Dissections of the Human Body, for the Use of Students. By the late R. E. Carrington, M.D., F.R.C.P. Second Edition, revised and enlarged, By W. A. Lane, M.S., F.R.C.S. 1888. pp. 380.

BLAKISTON, SON & Co., Philadelphia.

Transactions of the College of Physicians of Philadelphia. Third Series. Vol. IX. 1887. pp. 203.

CHAMBERS, W. & R., London.

Chambers's Encyclopædia. New Edition. Vol. I. A—Beaufort. 1888. pp. 824.

CHURCHILL, J. & A., New Burlington-street, London.

The Passage of the Air and Fæces from the Urethra. By Harrison Cripps, F.R.C.S. 1888. pp. 80.

St. Thomas's Hospital Reports. New Series. Edited by Dr. Gulliver and Mr. Clutton. Vol. XVI. 1887. pp. 424.

A Manual of Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.S. Vol. II. 1888. pp. 975.

FALKNER, G. & SONS, Manchester.

Engravers and Engraving. Birkenhead Literary and Scientific Society. Session 31, 1887-88. The Inaugural Address, by F. Vacher. With 5 Plates. pp. 106.

HAMILTON, ADAMS & Co., Paternoster-row, London.

The Medical Annual and Practitioners' Index. 1888. Sixth year. pp. 619.

HIRSCHFELD BROS., Bream's-buildings, Fetter-lane, London.

Notes on Diseases of Women. By Jas. Oliver, M.D.Ed., F.R.S.Ed. 1888. pp. 135.

LEWIS, H. K., Gower-street, London.

A Practical Treatise on Materia Medica and Therapeutics. By R. Bartholow, M.D., LL.D. Sixth Edition, revised and enlarged. 1888. pp. 802.

LONGMANS, GREEN, & Co., Paternoster-row, London.

Lectures to Practitioners. By W. T. Gairdner, M.D., and Joseph Coats, M.D. With 28 Engravings on Wood. Price 12s. 6d. 1888. pp. 286.

Prosperity or Pauperism? Physical, Industrial, and Technical Training. By the Earl of Meath (Lord Brabazon). Price 5s. 1888. pp. 342.

MACLEHOSE, JAS., & SON, Glasgow.

Tables of European History, Literature, Science and Art, from A.D. 200 to 1888, and of American History, Literature, and Art. By John Nichol, M.A., LL.D. Fourth Edition, revised and enlarged. 1888.

MACMILLAN & Co., London and New York.

The New Judgment of Paris. By P. Lafargue. Vols. I. and II. pp. 277 and pp. 274. 1888.

OTIS, CLAPP & SON, Boston and Providence.

Similia Similibus Curantur? Addressed to the Medical Profession. By C. S. Mack, M.D. 1888. pp. 31.

RODWAY, G., York-street, Covent-garden, London.

Lectures on Diseases of the Eye. By C. R. Taylor, F.R.C.S. and M.D.Ed. 1888. pp. 97.

SMITH, ELDER, & Co., Waterloo-place, London.

St. Bartholomew's Hospital Reports. By W. S. Church, M.D., and W. J. Walsham, F.R.C.S. Vol. XXIII. 1887. pp. 472.

SPON, E. & F. N., Strand, London.

Turning Lathes. A Manual for Technical Schools and Apprentices. With 194 Illustrations. By James Lukin, B.A. 1888. pp. 160.

SWAN SONNENSCHEIN, LOWREY & Co., Paternoster-square, London.

Dying Scientifically: A Key to St. Bernard's. By Æsculapius Scalpel. 1888. pp. 120.

THOM & Co., Limited, Abbey-street, Dublin.

Royal University of Ireland. The Calendar for 1888. pp. 340.

WATT, A. P., Paternoster-square, London.

Three Lectures on the Forms of Nasal Obstruction in Relation to Throat and Ear Disease. By Greville MacDonald, M.D. 1887. pp. 80.

Itinerary through Corsica, Illustrated by 5 Maps and one Plan; by C. B. Black (A. and C. Black, Edinburgh, 1888).—The Recent Outbreak of Rabies among the Deer in Richmond-park; by Jas. I. Lupton, F.R.C.V.S. (W. Lloyd, Richmond, Surrey, 1888).—The Health of Children; by Angel Money, M.D., B.S., M.R.C.P. (H. K. Lewis, Gower-street, London, 1888).—Extension of Time of Culture in Dr. R. Koch's Bacteriological Water Test by Partial Sterilisation, with special reference to the Metropolitan Water Supply; by G. Bischof, F.I.C., F.C.S. London, 1888.—A Letter to the Registrar-General on the Increase of Cancer in England, and its Causes; by J. F. Churchill, M.D. (D. Stott, 370, Oxford-street, London).—Antiseptic Treatment: a Book for Ladies and Ladies' Nurses; by A. E. Bridger, B.A., M.D., F.R.C.P. (W. Jones, 13, Upper Baker-street, London, 1888).—Index Medicus; Vol. X., No. 1, January, 1888 (Trübner and Co., Ludgate-hill, London).—Nouvelle Méthode de Traitement de la Diphthérie; par le Docteur G. Guelpa (Doin, 8, Place de l'Odéon, 1887).—Modern Education, its Defects and Remedies; by J. Gibson, M.A. (Cornish and Sons).—Eye Diseases; what the Public should Know of them; by C. S. Jeaffreson, F.R.C.S.E., F.R.M.S. (Walter Scott, Warwick-lane, Paternoster-row, London, 1888).—On the Prevalence and Distribution of Phthisis, and other Diseases of the Respiratory Organs in Ireland; by T. W. Grimshaw, MD., M.Ch.Dub. (J. Falconer, Dublin).—Magazines for March: Good Words, Sunday Magazine, Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, Scribner's Magazine, the American Magazine.—Aids to Dental Surgery; by A. S. Underwood, M.R.C.S. (Baillière, Tindall, and Cox, King William-street, Strand, London).—The Bones of the Leg, considered as one Apparatus; by Thos. Dwight, M.D. (Cupples and Hurd, 94, Boylston-street, Boston, U.S.), 1888; price 25 cents.—Psilosis, or "Sprue;" its Nature and Treatment; by Geo. Thin, M.D. (J. and A. Churchill, New Burlington-street, London), 1888.—The Lettsomian Lectures, January, 1888: On some Points in the Surgery of the Urinary Organs; by Reginald Harrison, F.R.C.S. (J. and A. Churchill, New Burlington-street, London), 1888.—On Cold as a Cause of Disease; by W. H. Ransom, M.D., F.R.S., F.R.C.P. (Williams and Norgate, Henrietta-street, Covent-garden, London), 1888.—The Therapeutic Action and Application of the Mineral Waters of Aix-les-Bains; by Stanley M. Rendall, M.D. Paris, M.B., C.M. Ed., Aix-les-Bains and Mentone (E. and S. Livingstone, 15, Teviot-place, Edinburgh), 1887.—On Infant-feeding and Infant Foods; by James McNaught, M.D. Edin., M.R.C.S. (John Heywood, 11, Paternoster-buildings, London), 1888.—The Royal London Ophthalmic Hospital Reports; edited by R. Marcus Gunn, F.R.C.S.; Vol. XII., Part 1, January, 1888 (J. and A. Churchill, New Burlington-street, London).

Medical Diary for the ensuing Week.

Monday, March 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: Locomotion and Allied Phenomena.
SOCIETY OF ARTS.—8 P.M. Prof. W. Chandler Roberts-Austen: Alloys. (Cantor Lecture.)
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Herbert Allingham: On the Causes of Failure to find the Colon in Lumbar Colotomy, and How they may be obviated.—Mr. Malcolm Morris: Is Common Psoriasis a Constitution or Local Disease?

Tuesday, March 13.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
ROYAL INSTITUTION.—3 P.M. Mr. G. J. Romanes: Before and after Darwin.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. Mickle: Insanity in Relation to Cardiac Disease and Phthisis. (Goulstonian Lecture.)
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. A. Marmaduke Sheild: A case of Neglected Dislocation of the Humerus, followed by Paralysis of the Nerves of the Hand and Forearm, treated by Excision of the Head of the Humerus.—Dr. W. Hale White: On the Naked-eye and Microscopical Variations of the Human Thyroid Body.

Wednesday, March 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: Loco notion and Allied Phenomena.
HUNTERIAN SOCIETY.—8 P.M. Adjourned Special General Meeting.
SOCIETY OF ARTS.—8 P.M. Prof. John Wrightson: Agricultural Education and Dairy Instruction.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. G. Massee: On the Type of a New Order of Fungi.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. Bolton G. Corney: Epidemic Cerebro-Spinal Fever in the Fiji Islands in 1885.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be exhibited by Dr. Savage, Dr. Heywood Smith, and others. Dr. Inglis Parsons: On the Changes produced by the Constant Current in Uterine Myomata.—Dr. John Shaw: Electricity in Gynæcology, a contribution to its study. Medical Batteries and other Electrical Apparatus will be exhibited.

Thursday, March 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. W. H. Dallinger: Microscopical Work with recent Lenses on the Least and Simplest Forms of Life.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. W. H. Dickinson: The Tongue as an Indication of Disease. (Lumleian Lecture.)
THE PARKES MUSEUM OF HYGIENE.—5 P.M. Miss M. A. Chreiman: Physical Culture. A few members of Miss Chreiman's classes will give a short demonstration of various exercises.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. A. G. Silcock: (1) Osseous Union in a case of Fracture of the Patella treated by Malgaigne's Hooks: (2) A case of Conjugate Lateral Deviation of the Eyes.—Dr. Sidney Phillips: A case of Hemiplegia in a Child, accompanied by Spasmodic Movement.—Mr. Herbert Page: A case of Traumatic Empyema and Pneumothorax. Cases by Mr. Treves and others.
NEUROLOGICAL SOCIETY OF LONDON.—8.30 P.M. Cases and Specimens at 8 P.M. Dr. Sharkey: (1) Fatal case of Tumour of Auditory Nerve; (2) Case of Atrophy of Frontal and Parietal Lobes consequent on Prolonged Spinal Paralysis.—Dr. Buzzard: (1) Sequel to a case of Multiple Paralysis of Cranial Nerves; (2) Case of Peripheral Neuritis; (3) Case of Cerebellar Tumour.—Drs. Hadden and Sherrington: Sections showing Ascending Degenerations in Spinal Cord.—Dr. Hadden: Ruptured Brachial Plexus, question of operation.—Dr. Hale White: Pyrexia in Rabbits from Lesions of the Corpus Striatum.—Dr. Beevor: Case of Bulbar Paralysis, with Clonus of Lower Jaw.

Friday, March 16.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Charles Stewart: Locomotion and Allied Phenomena.
CANCER HOSPITAL, BROMPTON.—4.30 P.M. Mr. F. Bowreman Jessett: The Treatment of Cancer and Malignant Disease.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. Louis Parkes: Death-rates as Tests of Healthiness.—Mr. C. A. Watts Parkinson: Notes of an Epidemic of Pneumonia.
SOCIETY OF ARTS.—8 P.M. Dr. F. J. Mouat: The Origin, Progress, and Influence of Universities in India.
ROYAL INSTITUTION.—9 P.M. Mr. John Murray: The Structure, Origin, and Distribution of Coral Reefs and Islands.

Saturday, March 17.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
SOCIETY OF ARTS.—3 P.M. Prof. J. Oliver Lodge: Protection of Buildings from Lightning. (Dr. Mann Lecture.)
ROYAL INSTITUTION.—3 P.M. Mr. William Archer: The Modern Drama: Scandinavian.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 8th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 2	30·22	W.	31	...	...	42	28	...	Cloudy
,, 3	30·01	N.E.	37	34	73	41	31	...	Cloudy
,, 4	29·90	W.	38	33	64	44	30	...	Cloudy
,, 5	30·05	W.	26	33	61	44	31	...	Cloudy
,, 6	30·03	W.	41	39	66	49	35	...	Cloudy
,, 7	30·22	N.W.	40	37	90	53	37	...	Bright
,, 8	29·85	S.W.	47	46	52	48	39	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

"EXTRAORDINARY INQUEST."

IN our comments on a recent inquest at Sefton, which appeared under the above heading in our issue of the 3rd inst., we stated that "no doctor was called in to see the man either before or after death." We are informed that as a matter of fact Mr. Rowlands of Great Crosby was called in by the deceased's mother after death had occurred, and made an external examination of the body. Mr. Rowlands found no marks of external injury, no signs of bleeding from the nose or ears, face pale, lips blue, rigor mortis general and well marked.

Auster.—We think our correspondent's letter must have miscarried, as we feel sure that the College authorities would have taken notice of such an advertisement.

Mr. G. Hadwen (Lille).—We are not in possession of the address mentioned.

Boycotted has omitted to enclose his card.

THE CARRIAGE TAX AND THE MEDICAL PROFESSION.

To the Editors of THE LANCET.

SIRS,—A few days ago a deputation from the Carriage Makers' Association waited upon the Chancellor of the Exchequer to urge upon him the desirability of some modification or remission of the tax upon carriages. Might not the present moment be a desirable one to try to obtain the abolition of the duty on conveyances used by medical men in the *bond fide* exercise of their profession. The doctor's gig must surely be considered as much a necessity, particularly in country districts, as the cart of the butcher or baker, for which no duty is paid.

I am, Sirs, yours truly,

Ludlam, Salop, Feb. 22nd, 1888. N. BROOKS, M.R.C.S.

GONORRHŒA IN AN INFANT.

DR. ERÖSS recently exhibited at a meeting of a Hungarian medical society an infant of sixteen months affected with gonorrhœa, the presence of gonococci being distinctly recognised. Injections of carbolic acid, alum, and sulphate of zinc cured the child in about a fortnight. Two other cases have been met with by Dr. Cséri.

Dr. Campbell (Garlands).—Very soon.

SEWER EXHALATIONS.

To the Editors of THE LANCET.

SIRS,—I have always deemed it to be most unsatisfactory that no steps should have ever been taken to get rid of the gas generated in the sewers of the metropolis. Twenty years ago the late Sir Arthur Helps, with whom I was in constant communication, discussed the question with me, and we agreed that until some steps were adopted that would either safely and thoroughly ventilate the main drains, or some plan carried out for the destruction of the gases generated therein, our sewer arrangements would be incomplete. It was in vain that Sir Arthur Helps called attention to the need of action in respect to this matter; but neither his position as Clerk of the Privy Council nor the fact of his pointing out the injurious effect of the escape of the gas through the grating in front of his house was of any avail. Still we go on contaminating the atmosphere with the exhalations arising from sewers, and in many instances a constant supply of this dangerous commodity is actually laid on by the neglect or ignorance of builders, plumbers, or those having charge of buildings or repair of house property.

In support of the charge of neglect involving such serious consequences I will give proof. Having been asked to look over a newly-built, handsome house, with the view of discovering the cause of an unpleasant odour which pervaded the first floor especially, I proceeded to examine the building from the kitchens, scullery, and basement generally, finding every drain well trapped and everything satisfactory. Mounting to the first floor, I soon recognised the fact of the existence of an unpleasant smell, traceable in the passages and best bedrooms. "Where," I asked, "is the water cistern?" It being pointed out, I went immediately to the waste pipe, which I found untrapped; and this pipe being in direct and close connexion with the main sewer, a constant supply of this fatal gas was as surely laid on as if it were an article necessary for domestic use. The only time the supply was cut off was the brief period when there was an overflow of water; but as the ball-cock was in proper order, this, as in all well-regulated houses, was only an occasional occurrence, and then lasting but a very brief period. "How was it," I was asked, "that you so promptly put your hand on this great defect?" My answer was that I had suffered from the same cause in my own house. That this serious neglect of ordinary precaution is common I could readily prove by more examples; and I would ask what better way could blood poisoning be created than by a ready supply of sewer gas?

My object in addressing you on this important subject is in consequence of my accidentally hearing of a plan for the "prevention of contamination of the atmosphere by the exhalations arising from sewers, the principle being that of complete destructive decomposition by heat, and the utilisation of the street gas-lamp for the purpose." I enclose a printed statement, and beg to say that I have no interest in this proposed plan for remedying an existing evil, hoping that you may deem it worth notice in the columns of THE LANCET, as the proposition seems feasible, so that attention may be directed to the idea, and inquiry made in the interest of the public in general as to its utility for the correction of so great a defect.—I am, Sirs, your obedient servant,

Putney, Feb. 27th, 1888. FRED. FEILD-WHITEHURST.

"URETHRAL INSTRUMENTS."

To the Editors of THE LANCET.

SIRS,—I have been advised not to continue the correspondence upon the above subject. However, my feelings are that I must ask you to be so good as to insert the following reply to Dr. D. Campbell Black's letter of last week.

Whether my "feelings" were "hurt" is of comparatively little importance. My reputation is of far greater importance. Dr. Black did more than merely draw attention to the similarity of the invention with that of Dr. Buchanan. In a very short and concise manner he stated that my instrument "exactly corresponded" with that of someone else, and deprecated "inventive propensity" at the same time, so adding my instruments to the list of "doubtful inventions."

Dr. Black says that "there is yet no evidence before him that it does not exactly correspond with the compound catheter of Dr. Buchanan." "Roma locuta est; causa finita est." There are in London those who are as competent as Dr. Black to give an opinion. Among these are many of the London leading hospital surgeons, who know that my instrument is an entirely different one. I am satisfied and content with their opinion. With regard to the "extraordinary statement imputing ignorance to the Glasgow instrument makers," I did nothing of the kind. I merely gave a copy of the short telegram received by me on Nov. 2nd, to show I had at once instituted inquiries. Surely, I am not responsible for that. In conclusion I may add that if Dr. Black had before writing his letter taken the trouble to become acquainted with my instrument, as, indeed, I did with that of Dr. Buchanan before replying to his insinuations, this controversy would not have arisen. I am, Sirs, yours truly,

Chandos-street, W., March 7th, 1888. E. DISTIN-MADDICK.

*** This correspondence must now cease.—ED. L.

REFUSING TO MEET IN CONSULTATION.

WE have carefully perused the correspondence sent us in this case. It is a pity that the matters in dispute were not long ago—for some of them go back twenty years or more—submitted for judgment to a third party. It is to Mr. L——'s credit that, after all, he submits to, and indeed himself suggests, this course. We gladly give our opinion, and will be pleased to further a friendly termination of the matters in dispute. As regards the individual cases we cannot see that in any one of them there was deliberate or intentional disrespect to Mr. L——. In several of the cases, the professional brother whom he blames had himself been the previous and general medical attendant. In others, and in most, he had expressed a desire to meet and co-operate with Mr. L——. So much for details in individual cases. Then the tone of his correspondence is that of a man who desires to be professional and courteous. In one of his letters he protests: "I can assure you that I have always shown you the kindest professional courtesy and consideration, and have ever entertained the kindest feelings towards you." Such language in a man of standing, and frequently consulted by his neighbours, cannot be lightly dismissed, and, unless the details of his conduct are out of harmony therewith, should be accepted as expressive of his wish and intention. We cannot see that the details of his conduct are inconsistent with this language, and we should advise Mr. L—— to reconsider his judgment in the matter.

Dr. Douglas Graham (Boston, U.S.A.) is thanked. The book is beneath notice.

RAPID EMPTYING OF THE BLADDER.

To the Editors of THE LANCET.

SIRS,—In your issue of Feb. 18th a letter appeared, signed "H. E. J.," in reference to the effects following the rapid emptying of a distended bladder. It may, perhaps, be of interest to your readers to know that similar phenomena to those described by "H. E. J." have been observed, under similar conditions, in the lower animals.

In the course of his lectures on Veterinary Medicine and Surgery, the Principal of the Royal Veterinary College at Edinburgh (Prof. Walley) many years ago directed the attention of the members of his class to the danger of withdrawing accumulated fluids too rapidly from any cavity or organ of the body—i.e., thorax, abdomen, or bladder; and he not only illustrated his meaning by a reference to the effects upon man of emptying the bladder too suddenly under circumstances allied to those detailed by your correspondent, but also stated that he had seen violent signs of nervous perturbation, such as nictation, palpitation of the heart, twitching of the voluntary muscles (especially of the face), convulsions, and threatened syncope produced in the horse by the too sudden withdrawal of urine from a distended bladder, or of serum from the chest or abdomen. I am, Sirs, your obedient servant,

Oxford-street, W., Feb. 22nd, 1888. W. RECKIE, M.R.C.V.S.

Mr. Gedge.—Hospital authorities are not obliged to keep a patient under treatment when he is no longer eligible for their institution, if the disease from which he is suffering or the nature of the complication makes it desirable to have the patien removed. The union infirmary has not the power to refuse to admi such cases as those to which our correspondent refers, which add materially to the expense of a hospital, and, besides, retard the recovery of other patients when it is not possible to isolate them.

S. A. H.—Such cases are not at all uncommon.

THE CONTAGION OF DIPHTHERIA.

To the Editors of THE LANCET.

SIRS,—It may be of some interest to the profession to have some statistics of the date of contagion in diphtheria.

On Wednesday, Feb. 22nd, I was called to see Mr. P——, suffering from diphtheria. He would hardly believe me when I told him what was the matter. On Friday, Feb. 24th his sister-in-law visited him, and sat with him some time. On the following Monday his nephew, who was staying at his sister-in-law's, went to the house for half an hour, but did not go near Mr. P——. The next day he complained of "sore-throat," and on the following day (Wednesday) I saw him with well-marked diphtheria on the arches of the palate, tonsils, and back of the throat. If the lad caught the disease from Mr. P——'s sister-in-law, it would place the time of first symptoms at four, and of eruption on tonsils at five, days. Or if he caught the disease when he visited the house himself, at one and two days respectively.

I am, Sirs, yours faithfully,

Chatham, March 1st, 1888. J. J. RAYE.

Mr. F. M. Knight.—1. We must refer our correspondent to a paper by Dr. Maguire on "The Albumens of the Urine," in THE LANCET, 1886, vol. i., p. 1062. Amongst the various methods for separating globulin is that of saturating the (previously neutralised) urine with magnesium sulphate. The globulin is thereby precipitated, and can be redissolved in water.—2. The works of Dr. Charles or Dr. Gamgee on Physiological and Pathological Chemistry.

Lionel has forgotten to enclose his name and address.

M. D.—Le Bulletin Médical, Nos. 11 and 12.

LIFELONG ILLNESS.

THE Milanese papers announce the death at eighty-five years of a woman named Carolina Ghezzi. She died in the Ricovero (House of Refuge) of Abbiategrasso on the 27th ult., having entered it as a patient on Dec. 14th, 1816. Calculating the money expended on her at one lira (9½*d.*) a day, she cost the Commune of Milan 26,000 lire (£1040). An invalid from her admission to her death, the poor woman lived and died in absolute ignorance of all but what passed within the four walls of the Ricovero. Of the great wars waged for the independence of her country she scarcely heard a whisper, and did not know the difference between the strongly contrasted uniforms of the Austrian and the Italian soldiery.

A NEW METHOD OF TESTING THE REFRACTION OF THE EYE.

To the Editors of THE LANCET.

SIRS,—In reference to the test described on page 417 of THE LANCET by Mr. Legge Roe, which he says "appears to be a modification of Scheiner's test applied to refraction," I wish to point out that the modification is so slight that the tests are practically identical. In Scheiner's test an object is viewed through two apertures simultaneously; in this test a single aperture is shifted from one position to the other without any appreciable interval. In Scheiner's, two images of the object, occupying different positions, are seen simultaneously in ametropia; in this, the image is seen first in one position and then in the other—in other words, it appears to move. Scheiner's test has frequently been applied as a test of refraction, but has never become a favourite.

I am, Sirs, yours truly,

Queen Anne-street, W., March 3rd, 1888. W. ADAMS FROST.

ERRATUM.—In our short notice of the late Mr. Merriman, on page 452, last line but one of the first column, the word "illness" was by an unfortunate oversight allowed to appear in place of the proper word, *interests*.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Pavy, London; Prof. Humphry, Cambridge; Dr. Lewers, London; Mr. R. Harrison, Liverpool; Dr. Bell Taylor, Nottingham; Mr. S. Snell, Sheffield; Dr. Mickle, London; Dr. Prosser James, London; Dr. Tatham, Salford; Mr. W. P. Fox, Clapham; Mr. Southam, Manchester; Mr. H. Haward, London; Dr. Yarrow, London; Mr. Barfield; Mr. Hartley, London; Mr. Mainwaring, London; Mr. Folks, London; Mr. Coster; Mr. C. Higgens, London; Mr. W. H. Brown, Leeds; Messrs. Oberley and Co., London; Dr. Hume, Newcastle-on-Tyne; Messrs. Christy and Co., London; Mr. G. Barling, Birmingham; Mr. Rowlands, Great Crosby; Dr. Park, Glasgow; Dr. Graham, Boston; Messrs. Barford and Perkins, Peterboro'; Mr. Hawkins, Birmingham; Messrs. Lee and Martin, Birmingham; Dr. Hopkirk, London; Messrs. Wyleys and Co., Coventry; Dr. Lynn, London; Mr. Page, London; Mr. Pugin Thornton, Canterbury; Mr. E. W. Phillips, Windsor; Messrs. Clark and Co., London; Mr. L. Bridger, London; Dr. Strahan; Mr. Adams Frost, London; Dr. Thompson, Bristol; Mr. Somes; Messrs. May and Co., London; Mr. W. Wallis, London; Mr. Feeny; Messrs. Street and Co., London; Dr. Bampton, Plymouth; Mr. R. W. Parker, London; Mr. Knight, Umballa; Mr. T. B. Browne, London; Dr. H. Blanc, Cannes; Dr. Kibbell, Hove; Dr. Steeves, Liverpool; Mr. W. Brown, Stapleton; Mrs. K. M. Heaxley, Boston; Mr. J. J. F. Barnes, Kingsdown; Dr. Creighton, London; Mr. J. Anderson; Mr. F. C. Turner, London; Mr. Atkinson, Madley; Mr. Borham, Fulham; Dr. C. H. Wise, Walthamstow; Mr. Prowse, Weston-super-Mare; Mrs. Jagger, Yorkshire; Mr. Frost, London; Mr. Hawes, Stafford; Mr. Marsh, London; Mrs. Maitland; Mr. Birchall, Liverpool; Mr. Bond, Newbury; Mr. Sykes, Leicester; Mr. Boughton, Ipswich; Messrs. Stern and Co., London; Mr. Fuge, Taunton; Mr. Godfrey, Northampton; Mr. Freeborn, Manitoba; Mr. Burcombe, Lincoln; Mrs. Pratt, Bournemouth; Mr. Churton, Leeds; Mr. Sampson, York; Mr. Haviland, Isle of Man; Mr. Jessett, London; Mr. Sheldon, London; Mr. Gurner, London; Mr. Beckett, Eastbourne; Mr. Holtby, York; Mr. Hodgson, London; Mr. Mercier, London; Mr. Mayhew, Ipswich; Mr. Beach, London; Messrs. Livingstone, Edinburgh; Dr. Silk; Dr. Sandford, Cork; Dr. Buckler, Paris; The Matron, Memorial Hospital, Jarrow; Spatium; Boycotted; G. B., Piccadilly; Lady Superintendent, Jersey Institution; E. F. B. London; R. R., Burnley; A. D. L., London; Hen Weithiwr; W. M. A., London; S. P., London; The Assistant Editor of *The Times*; Enquirer; Fever Hospital, Manchester; L. H. P.; Victoria Infirmary, Northwich; L.S.A. Lond.; Physician.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Corbet, Kidderminster; Mr. Richardson, Sussex; Dr. Cuthbertson, Rhondda Valley; Mr. Jackson, Sheffield; Mr. White, London; Messrs. Blake and Co., Leeds; Mr. Williams, Harrogate; Mr. Fiske, Tunbridge Wells; Dr. Popham, Salop; Mr. Counsellor, Hull; Messrs. Preston Bros., Huddersfield; Mr. Gilroy, Ecclefechan; Mr. Copeland, Fence Houses; Dr. Coates, Tredegar; Dr. Saul, Lancaster; Messrs. Clifton and Co., Bristol; Mr. Gohagan, Suffolk; Mr. Duckett; Messrs. Lee and Nightingale, Liverpool; Mr. Greensall, Southport; Messrs. Cox and Co., Brighton; Mr. Kemp, Castleford; Mr. Daly; Messrs. Eason and Son, Dublin; Mr. Hoar; Mr. Nevill, Totnes; Mr. Merlin, Long Sutton; Mr. Todd, Carlisle; Miss Drury, Stamford; Messrs. Austin and Son, Clifton; Mr. Runsford, Burton-on-Trent; Messrs. Stent and Son, Guildford; Mr. Wormald, Manchester; Messrs. Sutton and Sons, Reading; Mr. Webb, Crondall; Mr. Aston, Bath; Mr. Hilliard, Aylesbury; Dr. Arundell, Wisbech; Dr. Barker, Walton; Mr. Keay, Eastbourne; Mr. Halstead, Arundel; Mr. Butler, London; Mr. Rowley, Barnsley; Mrs. Masters, Stockport; Dr. Thompson; Mr. Walker, Aberdeen; Mr. Lacy, Catfield; Dr. Hughes, Llanberis; Dr. Coombs, Pasbold; Mr. Ventum, London; Mr. Heywood, Manchester; Mr. R. Storer, Notts; Miss Carson, Burton-on-Trent; Messrs. Daw and Son, London; Mr. Thornton, Canterbury; Dr. McVeagh, Coventry; Mr. Appleton, Stockton; Mr. Gibson, Ayrshire; Mr. Armstrong, Manchester; Mr. Abraham, Pentre; Mr. Dawson, Bath; Dr. Hamerton, Notts; Miss Hickman; Mr. Niall, Blackburn; Antipyrin, London; V. A. C., London; Zona, London; X. Y., Newcastle; The Hamilton Association, London; Medicus, Glasgow; The Bolton Infirmary and Dispensary; C. M., Edinburgh; K., London; Hilda, Yorks; Sister Marie; Medicus, Derbyshire; Medicus, Manchester; Hospital for Women, Soho-square; Medicus, Sheffield; X. A. M., London; Queen Charlotte's Lying-in Hospital; Medical, Huddersfield; Barnwood House Hospital, Gloucester; T. S., Manchester; P., London; Parish of Paddington; Blandford, Norton; A., London; Medicus, South Wales; Z., Stamford; Nemo, London; Sigma, London; A. C., Stoke Newington; Rural, London; Vertex, Yorkshire; North-West London Hospital; A. P., London; G. H., Rusholme; Medicus, Bridgend; B., London; Partner, London; Medicus, Holloway; J. V. G., London; A. S. H., London; Delta, London; T. C., London; N., London; R. Q., London; Ready, London.

Nottingham Daily Express, Southport Visitor, Yorkshire Post, Windsor and Eton Express, Bridlington Free Press, Advocate of India, Birmingham Daily Post, Tasmanian News, Walsall Observer, Irish Times, Nottingham Daily Guardian, Devon and Exeter Daily Gazette, Photographic Art Journal, Imperial Review, &c., have been received.

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